THE STATE OF TEXAS

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**COUNTY OF CAMERON** 

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BE IT REMEMBERED on the 11<sup>th</sup> day of June 2015, there was conducted a Regular Meeting of the Cameron County Regional Mobility Authority, at the Joe G. Rivera and Aurora de la Garza County Annex thereof, in San Benito, Texas, for the purpose of transacting any and all business that may lawfully be brought before the same.

HE BOARD MET AT:	PRESENT:
:00 Noon	
	CHAIRPERSON
	MICHAEL SCAIEF
	DIRECTOR
	DAVID N. GARZA
	DIRECTOR
	RUBEN GALLEGOS, JR.
	DIRECTOR
	MARK ESPARZA
	DIRECTOR
	NAT LOPEZ
	DIRECTOR
	DIRECTOR
	DAVID E. ALLEX
	ABSENT
	HORACIO BARRERA
	ABSENT
	ABSENT

The Meeting was called to order by Vice-Chairman Ruben Gallegos, Jr., at 12:04 P.M. At this time, the Board considered the following matters as per RMA Agenda posted and filed for Record in the Office of the County Clerk on this 8<sup>th</sup> day of June 2015 at 9:07 A.M.



#### **AGENDA**

Regular Meeting of the Board of Directors of the Cameron County Regional Mobility Authority

Joe G. Rivera and Aurora de la Garza County Annex 1390 West I69E San Benito, Texas 78586

Thursday, June 11, 2015

12:00 Noon

Accepted for Filina in: Cameron Counts

On: Jun 08,2015 at 09:07A

Alejandro Cuellar

#### **PUBLIC COMMENTS:**

1. Public Comments

#### PRESENTATIONS, RESOLUTIONS AND/OR PROCLAMATION ITEMS:

- 2. Presentations/Resolutions/Proclamations
  - A. Presentation and Acknowledgement of the GEC Report for May 2015
  - B. Presentation of the Status of the SH 550 Direct Connector Project for May 2015
  - C. Presentation of the Marketing Efforts for the Month of May 2015

#### **CONSENT ITEMS:**

- 3. All Item(s) under the Consent RMA Agenda are heard collectively unless opposition is presented, in which case the contested Item will be considered, discussed, and appropriate action taken separately
  - A. Consideration and Approval of the Minutes for:

June 4, 2015 - Special Meeting

#### **ITEMS FOR DISCUSSION AND ACTION:**

- 4. Action Items
  - A. Approval of Claims
  - B. Consideration and Approval of the monthly Financial Statements for May 2015
  - C. Consideration and Approval for Notice to Proceed with Purchase of the Project Host Server

**ADJOURNMENT:** 

Signed this  $\underline{\theta}$  day of June 2015

David E. Allex

Chairman

#### **NOTE:**

Participation by Telephone Conference Call – One or more members of the CCRMA Board of Directors may participate in this meeting through a telephone conference call, as authorized by Sec. 370.262, Texas Transportation Code. Each part of the telephone conference call meeting that by law must be open to the public shall be audible to the public at the meeting location and will be recorded. On conclusion of the meeting, the recording will be made available to the public.

#### **PUBLIC COMMENTS**

#### 1 PUBLIC COMMENTS

None were presented.

#### PRESENTATIONS, RESOLUTIONS AND/OR PROCLAMATION ITEMS

#### 2-A Presentation and Acknowledgement of the GEC Report for May 2015

Mr. Richard Ridings with HNTB went over the status of Cameron County Regional Mobility Authority Projects.

Treasurer Scaief moved to acknowledge the GEC Report for May 2015. The motion was seconded by Director Esparza and carried unanimously.

The Report is as follows:		

#### 2-B Presentation of the Status of the SH 550 Direct Connector Project for May 2015

Mr. Agustin Ramirez from S&B Infrastructure went over a Power Point Presentation in providing a status report for the SH 550 Direct Connector Project for the month of May 2015. The power point is attached.

Secretary Garza moved to acknowledge the report on the SH 550 Direct Connector Project. The motion was seconded by Director Esparza and carried unanimously.

The Power Point Presentation is as follows:

#### 2-C Presentation of the Marketing Efforts for the Month of May 2015

Mrs. Michelle Lopez, RMA Marketing and Communications Director went over a status report for the month of May 2015. The report is attached.

Director Esparza moved to acknowledge the marketing report. The motion was seconded by Treasurer Scaief and carried unanimously.

The Report is as follows:	

#### **CONSENT ITEMS**

ALL ITEM(S) UNDER THE CONSENT RMA AGENDA ARE HEARD COLLECTIVELY UNLESS OPPOSITION IS PRESENTED, IN WHICH CASE THE CONTESTED ITEM WILL BE CONSIDERED, DISCUSSED AND APPROPRIATE ACTION TAKEN SEPARATELY

#### 3-A Consideration and Approval of the Minutes for:

June 4, 2015 - Special Meeting

Secretary Garza moved to approve the minutes of June 4, 2015 Special Meeting. The motion was seconded by Director Lopez and carried unanimously.

#### **ACTION ITEMS**

#### 4-A Approval of Claims

The attached claims were presented to the Board of Directors for approval.

Mr. Pete Sepulveda, Jr., RMA Executive Director introduced the claims into the record and recommended approval of the Claims.

Director Lopez moved to approve the Claims subject to the final amount for the Anderson Columbia claim. The motion was seconded by Director Esparza and carried unanimously.

The Claims are as follows:

#### 4-B Consideration and Approval of the monthly Financial Statements for May 2015

Mr. Adrian Rincones, RMA Controller and Financial Officer went over the attached Financial Statements for the month of May 2015.

Secretary Garza moved to approve the Financials for the month May 2015. The motion was seconded by Director Esparza and carried unanimously.

The Financials are as follows:

#### 4-C Consideration and Approval for Notice to Proceed with Purchase of the Project Host Server

Mr. Adrian Rincones, RMA Controller and Financial Officer went over the purpose and need for the Notice to Proceed with the purchase of the Project Hose Server.

Treasurer Scalef moved to approve proceeding with the Notice to Proceed with the purchase of the Project Host Server. The motion was seconded by Secretary Garza and carried unanimously.

#### **ADJOURNMENT**

There being no further business to come before the Board and upon motion by Director Esparza seconded by Secretary Garza and carried unanimously the meeting was ADJOURNED at 12:52 P.M.

APPROVED this 9th day of July 2015.

ATTESTED:

SECRETARY DAVID N. GARZA

2-A PRESENTATION AND ACKNOWLEDGEMENT OF THE GEC REPORT FOR MAY 2015

Pete Sepulveda, Jr.
Executive Director
Cameron County Regional Mobility Authority
1100 East Monroe Street
Brownsville, Texas 78520



June 1, 2015

Dear Mr. Sepulveda,

The following is a summary of our progress on the subject projects for the month of May 2015.

#### **Project Management:**

#### General GEC

- Prepared & submitted CCRMA GEC Invoice for work performed on various Work Authorizations from Previous Contract (PC) and Current Contract (CC). Updated and submitted April 2015 GEC report.
- On May 14th, Richard Ridings, Debbie Taylor and Greg Garcia attended the Regular Meeting of the CCRMA Board of Directors.
- Assisted CCRMA Controller on activities involving reporting and documentation of invoicing, progress reports and other accounting/billing matters.

#### West Rail Relocation International Coordination (CC - Work Authorization No. 4):

This Work Authorization provides appropriate subconsultant(s) for staff coordination with the Mexican agencies to monitor and determine project schedules, permit requirements, funding technical agreements and design for the West Rail Relocation around Brownsville, Texas. The project plans will require approval by Secretaría de Comunicaciones y Transportes (SCT), Comisión Internacional de Limites Y Aguas (CILA) and Kansas City Southern Mexico (KCSM).

- Construction progress on the Mexican side:
  - o International Bridge, 100%
  - Roadway and Patios, 100%
- During a Thursday, April 9<sup>th</sup> visit to the new rail crossing facilities, the following progress was noted:
  - O Gamma Rays. Regarding their relocation on the Mexican side, a memorandum was received on March 25 from Lic. Martha Elena Cantero, a LEIDOS representative, which reads as follows:
    - "Regarding the reference contract for the relocation of the non-intrusive revision equipment, which utilizes gamma rays technology, serial number VR00007, property of Tributary Administration Services (SAT) I inform you that according to instructions received from SAT dated January 30, 2015, the equipment relocation

activities have taken place, to the effect that the equipment has been installed, has been tested and is ready to operate in its new location at km 6+400 at the new Railroad Bypass of Matamoros. In addition, I am affixing photographs taken by LEIDOS personnel on March 11, 2015, as evidence of the state of the equipment on its new site. This is the date when our personnel left the site. It is important to mention also, that as an express request from SAT and for security reasons, accessories and components located in the equipment's operation cabin in its former location have not been removed. Corresponding instruction from SAT has not been received, nevertheless this has not been an obstacle to conducting successful tests on operation of equipment in its new site, and relocation of the remaining components can be completed in few hours as soon as SAT gives instruction to do so.

Therefore, we wish to inform you that our client is ready to carry out the delivery-receipt of equipment at its new site in the stipulated terms of Clause Seven of the reference contract as soon as the SAT and SCT determine it is convenient to do so.

Finally, it is essential to emphasize that the new site at which the equipment is currently installed is a very isolated place located in an area of high insecurity and, according to our view, lacking adequate protection for both staff and the team, as well as the equipment, so we reiterate the critical importance of the relevant authorities from the Mexican Government taking appropriate security measures to ensure the continued integrity of the team under the responsibility of the SAT."

- O Customs and Senasica inspection platforms. Lic. Israel Falcon Jimenez, Resident II of Construction at the SCT Tamaulipas Center, stated that it is 100% complete and the roof was completed. However, at the time of testing, they realized that wider cars cannot pass. Therefore, tests will be conducted en the next two weeks to take appropriate measures to address this.
- The perimeter fence requested by the Customs General Administration is 100% complete.
- o The Kansas City Southern de Mexico telecommunications tower is 100% complete.
- o The structure for the relocation of Gamma Rays is 100% complete.
- O Construction to prevent flooding in the driveway is 95% complete and are expected to be finished by April 30, 2015.
- o The three surveillance booths. They will enter the bidding process and its construction will last a month and a half. They are expected to be complete by June.
- On April 13, 2015 a meeting with the new Director General of Railway and Multimodal Transport, Lic. Guillermo Nevares Elizondo, which was also attended by Lic. Fernando Tehuintle

Basanez, Deputy Director General of Multimodal Transport and Logistics. During the meeting the issue of International Railway Project Brownsville-Matamoros was exposed. Also, issues of delivery-reception, security and the start of rail operations were discussed.

Regarding security at the international bridge and patios on the Mexican side, a meeting was held in the city of Matamoros on March 23 with representatives from Highway Development General Administration, the municipality of Matamoros and federal security agencies. An agreement was reached that the Department of the Navy from the Mexican side will guard the premises and it was agreed that they would coordinate with Engineer Sofía Manzano Loza, Resident in Construction at the SCT Center in Tamaulipas who will deliver the keys and allow a group of four active duty personnel to safeguard the Gamma Rays equipment.

The deputy admiral requested, under the reciprocity principle, support for the active duty personnel by presenting a list of needs to Lic. Marco Antonio Frías Galván, Adjunct Executive Director of Highway Development at the Ministry of Communications and Transport and Dr. Arturo de las Fuentes committed to immediately deliver the list to Customs Executive Director to accelerate the process and be able to count with the protection from the navy as soon as possible. In addition, they offered to write a letter explaining the risks the guards could run being inside the Gamma Rays facilities. Due to certain Mexican federal agency limitations, the prior could not be requested through SEMAR, so two actions must be taken:

The first is a request that the Ministry of Foreign Relations intercede with the Navy for protection of the facilities; the second is that the Municipality of Matamoros conduct a meeting on Friday with Navy officials to underline the importance of protection of the Gamma Rays equipment and the importance of guards staying at the facilities.

KCSM delivered household goods to Customs General Administration, so the Navy will be at the patios until the date when the construction is delivered officially to KCSM and to Customs General Administration, who is responsible for security at the premises.

- Regarding progress on the American side, a letter signed by Pete Sepulveda, Cameron County Judge and Tony Martínez, Mayor of Brownsville, was received, in which they express to Steven C. Kameny of the Department of State, that on the 2nd of April of this year, a final inspection visit was made on the United States side, during which all parties agreed that it is ready for operation. (City of Brownsville, Cameron County, Cameron County Regional Mobility Authority, DHS, CBP. UPRR and the construction company). It was also stated that the endorsement of the Presidential Permit and some lighting was missing, but this does not impeded the start of operations.
- Regarding the delivery-reception process of the new premises from the Ministry of Communications and Transport (SCT) to Kansas City Southern Mexico (KCSM), which took place on March 24 at 11:00 a.m., the 3rd Technical Infrastructure, Operation and Legal Working Group reviewed the detachment of section KmF-328+017.60 to KmF-330+570.00 from the F line and the delivery-reception of the Matamoros Railroad Bypass, the new railroad patio and the new International Bridge, by the Ministry of Communications and Transports to Kansas City Southern Mexico. Agreements reached:
  - o Engineer Alfredo Briano, presented on progress of the Matamoros Railroad By pass.

- KCSM representatives asked for a week to present on the subject of International Crews. This was in response to the petition from the Director Railroad Regulation, derived from the request from the Ministry of Foreign Relations.
- Or. Vladimir Robles cited concerns regarding security from the northernmost point of the patio to the international bridge and the necessity of confinement so that in the space between the gamma rays and the bridge, the possibility of altering the merchandise detected by the gamma rays is diminished.
- o The Director of Railroad Regulations considers this issue implies matters of public security where different authorities intervene and that it is the obligation of the SCT to guarantee operative security.
- The Director of Railroad Regulations asked representatives from KCSM how long after the SCT/KCSM agreement is delivered will it be signed.
- Once DGTFM submits the executive project, including the signed and scanned maps according to SCT formalities, the agreement will be delivered to KCSM for signature according to the Executive Director's agenda.
- o The steps to follow for final delivery to KCSM would be:
  - 1. Signature of agreement KCSM/ DGTFM.
  - 2. Verify the state of the Railroad bypass and facilities DGTFM/DC/CSCTT/KCSM.
  - 3. Verify the state of the current KCSM/DGTFM/CSCTT facilities.
  - 4. Physical delivery of the railroad bypass to KCSM.
  - 5. Future agreement by INDAABIN to Highway Development.

It was agreed that the process will try to be condensed so that Kansas City Southern of Mexico can begin operating the rail patios and Customs General Administration and SENASICA can begin operations. The process is expected to be complete by July 15.

- On Thursday, April 9, at 4:00 p.m., there was a visit to the patios and new Brownsville-Matamoros International Railroad Bridge, by a delegation from the National Chamber of Industry and Transformation (CANACINTRA).
- The date for the 82nd Technical Meeting is Friday, May 8, 2015 at 10:30 am.

## South Padre Island Second Access Phase 3A & 3B (PC - Work Authorization No. 17 and CC - Work Authorization No. 2):

This Work Authorization provides engineering and environmental services associated with the development and advancement of the NEPA process for the proposed South Padre Island (SPI) 2nd Access Project in Cameron County, Texas. The proposed Project will provide an alternate route to the Queen Isabella Memorial Causeway; thus, enhancing local and regional mobility, and facilitating effective evacuation of the island in times of disaster, hurricanes, and other emergencies. This Work Authorization continues the environmental and schematic design tasks necessary on the Recommended Preferred Alternative to advance the project to a Record of Decision (ROD).

- HNTB continues to provide assistance and information to CCRMA Board and staff, members of the general public and stakeholders.
- Coordination, including weekly meetings, with TxDOT Pharr District, TxDOT ENV and FHWA has been on-going regarding the FEIS tasks.

- Submitted responses to TxDOT's 90% submittal comments.
- Continued coordination with subconsultants on route and design studies for preparation of 100% submittal (i.e. typical sections, geometric design, preliminary cross sections, preliminary traffic control, 3D modeling, and schematic plan preparation, preliminary construction cost estimate, hydrology, hydraulic studies, drainage design and preliminary bridge layouts).

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- Coordinated with TxDOT Pharr district to include project in STIP on 5/13.
- Revised master design schedule and submitted to subconsultants for review.
- Initiated traffic operations analysis of selected intersections for future no-build and future build, including AM and PM peak hour and tourist peak conditions.
- Continued coordination with subconsultants on geotechnical services.
- Summary report of Context Sensitive Solutions (CSS) workshops and survey results are complete and undergoing internal review.
- First draft of Final EIS (12/23) in revision. Comments from CCRMA, TxDOT-Pharr, TxDOT-ENV and FHWA have been received and responses have been prepared.
- Coordinated with subconsultants on FEIS and permitting tasks.
- Responding to TxDOT and FHWA comments on the Seagrass/Wetland Delineation/Vegetation and Habitat Report and Biological Assessment. Finalizing impact calculations and revising reports for submittal to agencies.
- Continued coordination with NMFS and TxDOT on questions concerning the Essential Fish Habitat Assessment.
- Attended meeting on Tuesday, May 19<sup>th</sup> with CCRMA, TxDOT, USFWS and Conservation Fund to discuss the potential impacts the Migratory Bird Conservation Lands might have on the project.
- Progressed contracting and coordination with the following subconsultants: SWCA completed remaining archeological work and received concurrence from THC. SWCA also advanced the biological assessment and submitted the revised Draft BA (04/21). Belaire environmental continued mitigation site modeling and scour assessments.
- Coordinated with GLO regarding the timing of application and upland owner coordination for utilization of the mitigation on state owned lands.

#### General Brant Road/FM 106 Extension (PC - Work Authorization No. 26)

This work authorization provides professional services and deliverables associated with the preparation of a categorical exclusion (to be reviewed by the Federal Highway Administration in anticipation of possible federal funding) and the completion of the Section 404 permitting process (including the development of a conceptual mitigation plan) for the project.

No activity this billing period.

#### Olmito Switch Yard & Repair-In-Place Facility (PC - Work Authorization No. 31)

This work authorization provides engineering services throughout the construction duration of the Olmito Switch Yard and Repair-In-Place (RIP) Facility by providing responses to the contractor's Requests for Information, Shop Drawing Review and As-Built construction plans.

HNTB is assisting with the completion and close out of this project.

#### West Rail Bypass, CI (PC - Work Authorization No. 33)

This work authorization provides professional services associated with construction inspection phase work for the West Rail Bypass.

• HNTB is assisting with the completion and close out of this project.

#### Outer Parkway Study (CC - Work Authorization No. 3)

This work authorization provides professional services and deliverables associated with a study for the Outer Parkway. The study is to be performed in a three phase effort to deliver a schematic design for the Outer Parkway project. The phases are:

- HNTB started on Work Authorization for the Environmental Assessment and Route Studies.
- Classification Letter was signed by TxDOT ENV on February 3<sup>rd</sup> concurring that the project be classified as an EA and that preparation of an EIS is not required.

#### West Rail RFIs, As-Builts (PC - Work Authorization No. 40)

This work authorization provides construction phase services throughout the construction of the West Rail Relocation Project by providing responses to Requests for Information from the contractor and providing AsBuilt construction drawings. Also, records keeping will be provided through the use of DashPort.

• No tasks performed for this month.

#### SH 32 GEC Preliminary Schematic and Environmental Approval (CC - Work Authorization No. 5)

This work authorization provides professional services for oversight, guidance, agency coordination, and issue resolution, necessary to expedite the preliminary development phases of these two SH 32 projects only. The two projects, which each have logical termini and independent utility, extend from US 77/83 to FM 3068 (herein referred to as SH 32-West) and from FM 3068 to SH 4 (herein referred to SH 32-East). The proposed projects are being developed by two prime subconsultants, (S&B Infrastructure, Ltd. and Traffic Engineers, Inc.) under the oversight of HNTB (GEC).

#### SH 32 West (Consultant - Traffic Engineers, Inc., or TEI):

- Continued project coordination with TEI.
- Archeological field was completed and report writing is underway.
- Coordinated with TxDOT and USFWS to modify land swap below 40 acres. Exhibit was submitted to TxDOT on 5/26.

#### SH 32 East (Consultant - S&B Infrastructure, Ltd., or S&B):

- Continued project coordination with S&B.
- Biological Assessment was revised per TxDOT comments, reviewed by the GEC and resubmitted to the TxDOT Pharr District for back check.
- Submitted schematic GEC comments to subconsultant on 5/27.
- Submitted EA GEC/TxDOT comments to subconsultant on 5/28.

## West Rail Bridge - RFI/Shop Drawings Review and CEI for Security Fencing, Gate, Illumination, and DHS Building Components (US portion of bridge only) (PC - Work Authorization No. 69)

• Continue to review and forward contractor's submittals.

- The contractor continues working on the final punch list items. Completion of all the items are expected to take place by May 31, 2015.
- Continue to perform site visits to verify completion of final punch list items.

#### **Consultant Management:**

 Continued coordination with subconsultants and S&B Infrastructure as prime consultant on SH 550 Construction management including discussions with USACE officials on wetland mitigation that was performed as part of this project.

#### **Agency Coordination:**

 Conducted ongoing discussions with CCRMA staff, TxDOT staff and subconsultants for preparation of SPI 2<sup>nd</sup> Access project (see specifics above), SH 550, Olmito Switch Yard Repair-In-Place Facility construction project, West Rail construction project, SH 32 East Loop EAs and other miscellaneous items.

Best regards,

Aichard L. Ridings, P.E.

Vice President

cc: Carlos Lopez, P.E.

#### May

Status Report					HNTB
Project		South Padre Island Phase 3A & 3B			
Work Authorization	17		WA Cost:	s	2,965,831,00
Supplemental	2	Affected Env & Env Consequences	SA Cost:		165,885.00
Supplemental	3	Affected Env & Env Consequences	SA Cost:	\$	415,622.00
Supplemental	4	Affected Env & Env Consequences	SA Cost:	\$	109,870.00
Supplemental	6	Affected Env & Env Consequences	SA Cost:	s	166,668.00
Supplemental	7	Affected Env & Env Consequences	SA Cost:	\$	40,290.00
Supplemental	8	Affected Env & Env Consequences	SA Cost:	\$	59,094.00
Supplemental	9	Affected Env & Env Consequences	SA Cost:	s	37,334.00
Supplemental	10	Affected Env & Env Consequences	SA Cost:	\$	4,488,102.00
Supplemental	11	Affected Env & Env Consequences	SA Cost:	\$	118,256.00
Supplemental	12	Affected Env & Env Consequences	SA Cost:	\$	15,827.00
Supplemental	13	Affected Env & Env Consequences	SA Cost:	\$	244,621.00
Supplemental	14	Affected Env & Env Consequences	SA Cost:	8	818,241.00
			Total Cost:		9.645.641.00
icope: Prepare sche Deliverable: Project a Interim financial and p Record of Decision (R	dministra roject ma	ation and coordination, schematic design of the Reco anagement plan, base and soil testing and core drillin	ommended Preferred Alterna ng, traffic forecasting, traffic o	tive, VE st	udy, toll facility study,
		Desired Asticity			
toute and Design Stu	dies	Project Activity			
Status:	Ongoin	g.			
Recent Activity:	Continu	ed to coordinate with subconsultants on schematic, f	inancial plan, traffic analysis	and geote	chnical surveys.
Upcoming Activity:		ation with subconsultant on development of 60% sub al due on 4/16/201 and 60% TxDOT submittal due or			
Outstanding Issues:	None.				
ocial, Environmental	and Eco	nomic Studies			
Status;	Ongoing				
Recent Activity:	archeolo anomoli	ed work on SWA #10 activities, including weekly mer ogical surveys are under TxDOT review. Coordinatec es. Coordinated with the USACE regarding potential ed calculations of indirect effects on seagrasses. Co	marine archeology work red relocation of the channel. M	uired to re eet with G	eview additional

Recent Activity:	anomolie Presente	es. Coordinated with the calculations of indirect	ne USACE regarding pot ect effects on seagrasse	ential relocation of the chans. Coordination with sub-co	nel. Meet with GIWW onsultants.	user groups.
Upcoming Activity:	Continue	work on SWA #10 ac	tivities.			
Outstanding Issues:	None.					
Field Surveying and P						
Status:	Ongoing.					
Recent Activity:			nts on field surveying. C Rand bathymetry survey:	oordination with subconsult s are complete.	ants and affected prop	erty owners on
Upcoming Activity:	Perform	field surveying.				
Outstanding Issues:	Continue	to coordinate with aff	ected property owners or	n ROE.		
	-	Task		Status	Date of Anticipated Completion	% Complete
Route and Design Stu	dies	***		Ongoing	10/14/2014	60%
Social, Environmental	and Econ	omic Studies		Ongoing	6/9/2015	50%
Field Surveying and Pl	hotogram	metry		Ongoing	4/30/2014	95%
WA Amount:	\$	9,645,641.00	Outstanding Invoice Number	Days Old	Invoice	Amount
Billed To Date:	\$	8,836,535.56	114-40619-PL-017	49	\$	172,184.94
Paid To Date:	\$	8,529,607.56	115-40619-PL-017	21	s	134,743.06
Unpaid Balance:	S	306,928.00				
Funding Source:						

Total: \$

306,928.00

#### May Status Report

HNTB

Project	West Rail Construction	on & Inspection Services			
Work Authorization	33 Construction & Inspec	ction Services	WA Cost:	\$	1,255,920.00
Supplemental	2 Construction & Inspec	ction Services	SA Cost:	\$	358,021.00
Supplemental	1 Construction & Inspec	ction Services	SA Cost:		48,623.00
			Total Cost:	\$	1,662,564.00
Description: This Wor	k Authorization is to provide co	Instruction inspection (CI)	for the Union Pacific Railroad (U	JPRR) West Rai	Bypass The
			rent location between Mexico ar		
Scope: Construction a	administration for the constructi	ion of the West Rail reloca	ation. The construction includes	track, drainage,	construction
sequencing, SWPPP, p	pay estimates, quantities, and s	schedule. This includes the	ne DHS facility on the north side	of US 281.	
Deliverable: West Ra	il bypass pay estimates, ARRA	nanenwork and construc	tion schedule		
Deliverable: VVCSt (Ka	ii bypass pay estimates, Airth	Project Activit			
West Rail Bypass Cons					
Status:	Ongoing.				
			orming a final cleaning up. Coord	dination with USA	ACE on
	mitigation site non-compliance	•			
Upcoming Activity:	Clean un				
openiing / ioamy.	olodii dp.				
Outstanding Issues:	Awaiting resolution of DHS cha	ange order items and the a	associated funding. Awaiting ap	proval of outstan	iding SWAs.
				Anticipated	
Mark Dall Oarskooth	Task		Status	Completion	% Complete
Project Management, A	on Inspection Services (CI)		0	10/04/0040	4000/
Process Invoices and F			Complete Complete	10/21/2013 10/21/2013	100%
Construction Inspecti			Complete	10/21/2013	100%
Construction Managem		**	Complete	10/21/2013	100%
Construction Observati			Complete	10/21/2013	100%
Record Keeping and Fi	le Management	-	Complete	10/21/2013	100%
Schedule			Complete	10/21/2013	100%
Project Close-Out			Complete	10/21/2010	10070
Construction Managem	ent		Complete	10/21/2013	100%
Record Keeping and Fi			Complete	10/21/2013	100%
Post Construction Serv	ices		Ongoing	10/21/2013	90%
		Outstanding Invaion	Origonia	10/21/2013	90%
WA Amount:	\$ 1,662,564.00	Outstanding Invoice Number	Days Old	Invoice .	Amount
Billed To Date:		Trainbo.	Days Old	iiivoice .	Allouit
	\$ 1,650,298.05				
	\$ 1,000,290.00				
Unpaid Balance:	Ψ <u>-</u>				
Funding Course					
Funding Source:			Total	•	
. unung course,			Total:	\$	-

#### May Status Report

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		П	

War Authorization   Image:	Project	Olmito RIP CI Service	s			
Supplemental SA Cost:    SA Cost	Work Authorization	47 Construction & Inspec	ction Services	WA Cost	: \$	134,538.00
Supplemental    SA Cost   Total Cost: \$ 134,538.00	Supplemental			SA Cos	: \$	-
Supplemental  SA Cost:  Total Cost: \$ 134,538.00  Description: This Work Authorization is to provide construction inspection (CI) for the Union Pacific Railroad (UPRR) Olimito Yard Repair in Place (RIP) Facility. The construction of this facility allow the UPRR to relocate their current repair in place operations from Hartingen to Olmito and expand their capabilities.  Scope: Construction administration for the Olimito Yard repair-in-place (RIP) facility and lighting. This includes building, equipment, track, drainage, construction sequencing, SWPPP, pay estimates, quantities, and schedule.  Deliverable: Olmito RIP Facility pay estimates, ARRA paperwork, and construction schedule.  Project Activity  Olimito RIP Facility Construction inspection Services (CI)  Status: Construction at 99% complete.  Recent Activity: Inc.  Upcoming Activity: BPUB to energize water line. Schedule final walk through with UPRR for facility acceptance.  Outstanding Issues: Valuating resolution on outstanding SWA. The County had been sent a request to provide warranty deed or metes and bounds for water/sewer line and submit payment on impact fees for both to BPUB.  Task Status Anticipated Completion  Task Status Anticipated Completion Project Management, Administration, QAQC Ongoing 1/31/2013 100%  Project Management, Administration, QAQC Ongoing 1/31/2013 100%  Project Management, Administration, QAQC Ongoing 1/31/2013 100%  Construction Inspection Services Ongoing 1/31/2013 100%  Construction Deservation and Inspection Ongoing 1/31/2013 100%  Construction Deservation and Inspection Ongoing 1/31/2013 100%  Construction Management Ongoing 1/31/2013 100%  Project Close-Out Ongoing 1/31/2013 100%  Number Days Old Invoice Amount Invoice Number Ongoing 1/31/	Supplemental			SA Cos	:	
Description: This Work Authorization is to provide construction inspection (CI) for the Union Pacific Railroad (UPRR) Olimito Yard Repair in Place (RIP) Facility. The construction of this facility allow the UPRR to relocate their current repair in place operations from Harlingen to Olimito and expand their crapabilities.  Scope: Construction administration for the Olimito Yard repair-in-place (RIP) facility and lighting. This includes building, equipment, track, drainage, construction administration for the Olimito Yard repair-in-place (RIP) facility and lighting. This includes building, equipment, track, drainage, construction administration for the Olimito RIP Facility pay estimates, quantities, and schedule.  Deliverable: Olimito RIP Facility pay estimates, ARRA papervork, and construction schedule.  Project Activity  None.  Upcoming Activity: None.  Upcoming Activity: BPUB to energize water line. Schedule final walk through with UPRR for facility acceptance.  Availing resolution on outstanding SWA. The County had been sent a request to provide warranty deed or metes and counts for water/sewer line and submit payment on impact fees for both to BPUB.  Task Status Completion  Task Status Completion  We Complete  Olmito RIP Facility Construction Inspection Services (CI)  Project Management, Administration, CA/QC Ongoing 1/31/2013 100%  Construction Inspection Services Ongoing 1/31/2013 100%  Construction Inspection Services Ongoing 1/31/2013 100%  Construction Management Ongoing 1/31/2013 100%  Project Close-Out  Ongoing 1/31/2013 100%  Construction Management Ongoing 1/31/2013 100%  Project Management Ongoing 1/31/2013 100%  Project Management Ongoing 1/31/2013 100%  Ongoing 1/31/2013 100%  Project Management Ongoing 1/31/2013 100%  Project Management Ongoing 1/31/2013 100%	Supplemental					
Description: This Work Authorization is to provide construction inspection (CI) for the Union Pacific Railroad (UPRR) Olimito Yard Repair in Place (RIP) Facility. The construction of this facility allow the UPRR to relocate their current repair in place operations from Harlingen to Olimito and expand their crapabilities.  Scope: Construction administration for the Olimito Yard repair-in-place (RIP) facility and lighting. This includes building, equipment, track, drainage, construction administration for the Olimito Yard repair-in-place (RIP) facility and lighting. This includes building, equipment, track, drainage, construction administration for the Olimito RIP Facility pay estimates, quantities, and schedule.  Deliverable: Olimito RIP Facility pay estimates, ARRA papervork, and construction schedule.  Project Activity  None.  Upcoming Activity: None.  Upcoming Activity: BPUB to energize water line. Schedule final walk through with UPRR for facility acceptance.  Availing resolution on outstanding SWA. The County had been sent a request to provide warranty deed or metes and counts for water/sewer line and submit payment on impact fees for both to BPUB.  Task Status Completion  Task Status Completion  We Complete  Olmito RIP Facility Construction Inspection Services (CI)  Project Management, Administration, CA/QC Ongoing 1/31/2013 100%  Construction Inspection Services Ongoing 1/31/2013 100%  Construction Inspection Services Ongoing 1/31/2013 100%  Construction Management Ongoing 1/31/2013 100%  Project Close-Out  Ongoing 1/31/2013 100%  Construction Management Ongoing 1/31/2013 100%  Project Management Ongoing 1/31/2013 100%  Project Management Ongoing 1/31/2013 100%  Ongoing 1/31/2013 100%  Project Management Ongoing 1/31/2013 100%  Project Management Ongoing 1/31/2013 100%				Total Cost	:: <b>\$</b>	134.538.00
Place (RIP) Facility. The construction of this facility allow the UPRR to relocate their current repair in place operations from Harlingen to Olmito and expand their capabilities.  Scope: Construction administration for the Olmito Yard repair-in-place (RIP) facility and lighting. This includes building, equipment, track, drainage, construction sequencing, SWPPP, pay estimates, quantities, and schedule.  Deliverable: Olmito RIP Facility pay estimates, ARRA paperwork, and construction schedule.  Project Activity  Olmito RIP Facility Construction inspection Services (CI)  Status: Construction at 99% complete.  Recent Activity.  None.  Upcoming Activity: BPUB to energize water line. Schedule final walk through with UPRR for facility acceptance.  Avaiting resolution on outstanding SWA. The County had been sent a request to provide warranty deed or metes and bounds for water/sewer line and submit payment on impact fees for both to BPUB.  Task Status Anticipated Completion  Olimito RIP Facility Construction Inspection Services (CI)  Project Management, Administration, QA/QC Ongoing 1/31/2013 100%  Construction Inspection Services Ongoing 1/31/2013 100%  Construction Inspection Services Ongoing 1/31/2013 100%  Construction Inspection Services Ongoing 1/31/2013 100%  Construction Services Ongoing 1/31/2013 100%  Construction Management Ongoing 1/31/2013 100%  Schedule Ongoing 1/31/2013 100%  Construction Management Ongoing 1/31/2013 100%  Record Keeping and File Management Ongoing 1/31/2013 100%  Construction Management Ongoing 1/31/2013 95%  Record Keeping and File Management Ongoing 1/31/2013 95%  Record Keeping and File Management Ongoing 1/31/2013 95%  Project Close-Out Ongoing 1/31/2013 95%  Record Keeping and File Management Ongoing 1/31/2013 95%  Project Close-Out Ongoing 1/31/2013 95%  Project Close-Out Ongoing 1/31/2013 95%  Record Keeping and File Management Ongoing 1/31/2013 95%  Project Close-Out Ongoing 1/31/2013 95%  Project Close-Out Ongoing 1/31/2013 95%  Project Close-Out Ongoing 1/31/2013 95%  Project	Description: This Wo	ork Authorization is to provide co	enstruction inspection (CI):			
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Outstanding Issues   Status   Construction at 99% complete.	drainage, construction	n sequencing, SWPPP, pay esti	mates, quantities, and sch	edule.		
Outstanding Issues   Status   Construction at 99% complete.	Deliverable: Olmito F	RIP Facility pay estimates, ARR	A paperwork, and construc	ction schedule.		
Status: Construction at 99% complete.  Recent Activity:  None.  Upcoming Activity:  BPUB to energize water line. Schedule final walk through with UPRR for facility acceptance.  Awaiting resolution on outstanding SWA. The County had been sent a request to provide warranty deed or metes and bounds for water/sewer line and submit payment on impact fees for both to BPUB.  Task  Status  Anticipated Complete  Olmito RIP Facility Construction Inspection Services (CI)  Project Management, Administration, QA/QC  Ongoing  1/31/2013  100%  Process Invoices and Progress Reports  Ongoing  1/31/2013  100%  Construction Inspection Services  Ongoing  1/31/2013  100%  Construction Observation and Inspection  Ongoing  1/31/2013  100%  Record Keeping and File Management  Ongoing  Project Close-Out  Construction Management  Ongoing  1/31/2013  100%  Project Close-Out  Construction Management  Ongoing  1/31/2013  100%  Project Close-Out  Construction Management  Ongoing  1/31/2013  95%  Record Keeping and File Management  Ongoing  1/31/2013  95%  Record Keeping and File Management  Ongoing  1/31/2013  95%  Paid To Date:  \$ 134,538.00  Unpaid Balance:  Funding Source:			Project Activit			
Recent Activity. None.  Upcoming Activity: BPUB to energize water line. Schedule final walk through with UPRR for facility acceptance.  Outstanding Issues: Awaiting resolution on outstanding SWA. The County had been sent a request to provide warranty deed or metes and bounds for water/sewer line and submit payment on impact fees for both to BPUB.  Task Status Completion % Complete  Olimito RIP Facility Construction Inspection Services (CI)  Project Management, Administration, QA/QC Ongoing 1/31/2013 100%  Process Invoices and Progress Reports Ongoing 1/31/2013 100%  Construction Inspection Services Ongoing 1/31/2013 100%  Construction Management Ongoing 1/31/2013 100%  Construction Observation and Inspection Ongoing 1/31/2013 100%  Record Keeping and File Management Ongoing 1/31/2013 100%  Project Close-Out  Construction Management Ongoing 1/31/2013 100%  Record Keeping and File Management Ongoing 1/31/2013 100%  Record Keeping and File Management Ongoing 1/31/2013 95%  Record Keeping and File Management Ongoing 1/31/2013 95%  WA Amount: \$ 134,538.00 Outstanding Invoice Number Days Old Invoice Amount  Billed To Date: \$ 134,538.00			(CI)			
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Task	Outstanding Issues:					or metes and
Project Management, Administration, QA/QC         Ongoing         1/31/2013         100%           Process Invoices and Progress Reports         Ongoing         1/31/2013         100%           Construction Inspection Services         Ongoing         1/31/2013         100%           Construction Management         Ongoing         1/31/2013         100%           Construction Observation and Inspection         Ongoing         1/31/2013         100%           Record Keeping and File Management         Ongoing         1/31/2013         100%           Schedule         Ongoing         1/31/2013         100%           Project Close-Out         Ongoing         1/31/2013         100%           Construction Management         Ongoing         1/31/2013         95%           Record Keeping and File Management         Ongoing         1/31/2013         95%           Record Keeping and File Management         Ongoing         1/31/2013         95%           WA Amount:         \$ 134,538.00         Number         Days Old         Invoice Amount           Billed To Date:         \$ 134,538.00         Invoice Amount         Unpaid Balance:         \$ -           Funding Source:         \$ -         Invoice Amount         Invoice Amount				Status	1	% Complete
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Construction Observation and Inspection         Ongoing         1/31/2013         100%           Record Keeping and File Management         Ongoing         1/31/2013         100%           Schedule         Ongoing         1/31/2013         100%           Project Close-Out         Ongoing         1/31/2013         95%           Record Keeping and File Management         Ongoing         1/31/2013         95%           Record Keeping and File Management         Ongoing         1/31/2013         95%           WA Amount:         \$ 134,538.00         Number         Days Old         Invoice Amount           Billed To Date:         \$ 134,538.00         Invoice Amount         Invoice Amount           Unpaid Balance:         \$ -         Invoice Amount         Invoice Amount           Funding Source:         * -         * -         * -						
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Schedule						
Project Close-Out         Ongoing         1/31/2013         1/31/2013         95%           Record Keeping and File Management         Ongoing         1/31/2013         95%           WA Amount:         \$ 134,538.00         Number         Days Old         Invoice Amount           Billed To Date:         \$ 134,538.00         Invoice Amount         Paid To Date:         \$ 134,538.00           Unpaid Balance:         \$ -         -         -         -           Funding Source:         -         -         -		ne wanagement			-	
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Record Keeping and File Management  Ongoing  1/31/2013 95%  WA Amount: \$ 134,538.00 Billed To Date: \$ 134,538.00 Paid To Date: \$ 134,538.00 Unpaid Balance: \$ -	Construction Manager	ment		Ongoing	1/31/2013	95%
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Paid To Date: \$ 134,538.00 Unpaid Balance: \$ -	WA Amount:	\$ 134,538.00		Days Old	Invoice	Amount
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Funding Source:	Paid To Date:	\$ 134,538.00				
	Unpaid Balance:	-				
	Funding Source:				<u>L</u> .	

#### **May Status Report**

HNTB

Work Authorization						
	49 S	SH 32 GEC		WA Cost:	\$	1,961,997.00
Supplemental	1 S	SH 32 GEC		SA Cost:	\$	18,277.00
Supplemental	2 5	SH 32 GEC		SA Cost:	\$	243,639.00
				Total Cost:	\$	2,223,913.00
expedite the prelimina utility, extend from US projects are being dev Scope: This Work Aut	ry develop 77/83 to F reloped by thorization	ment phases of these two M 3068 (herein referred t two prime subconsultants	o SH 32 projects only. The two as SH 32-West) and from I is, (S&B Infrastructure, Ltd. and element of the development of the state of the development of the developm	ance, agency coordination, an vo projects, which each have lo FM 3068 to SH 4 (herein referr Id Traffic Engineers, Inc.) unde of two environmental assessm	ogical termini and red to SH 32-Eas er the oversight o	d independent st). The propose of HNTB (GEC).
Deliverable: Meeting	notes, sch	edules, document review	s, permitting strategies.			
			Project Activity			
East Loop EA						
Status:			d. SH 32-East EA prepared.	Permit application to TxDOT. S		
Recent Activity:				occurred between 4/15/14 to 4		uilles Femili
	1					
Upcoming Activity:		s of EA, BA and archeolog	gy results.			
Upcoming Activity: Outstanding Issues:		s of EA, BA and archeolog	gy results.			
Outstanding Issues:		s of EA, BA and archeolog	gy results.	Status	Date of Anticipated Completion	% Complete
Outstanding Issues:	None	Task	gy results.	Status	Anticipated	
Outstanding Issues:	None	Task	gy results.	Status	Anticipated	% Complete
Outstanding Issues:	None	Task	gy results.	Status	Anticipated	
Outstanding Issues:	None	Task	gy results.	Status	Anticipated	
Outstanding Issues:  East Loop EA  Project Management a	None	Task	Outstanding Invoice		Anticipated Completion	97%
Outstanding Issues:  East Loop EA  Project Management a	None and Coordin	Task nation 2,223,913.00		Status  Days Old	Anticipated Completion	
Outstanding Issues:  East Loop EA  Project Management a  WA Amount:  Billed To Date:	None and Coordin	Task nation  2,223,913.00 2,162,380.01	Outstanding Invoice		Anticipated Completion	97%
Outstanding Issues:  East Loop EA  Project Management a  WA Amount:  Billed To Date:  Paid To Date:	None and Coordin	Task nation 2,223,913.00	Outstanding Invoice		Anticipated Completion	97%
Outstanding Issues:  East Loop EA  Project Management a  WA Amount:  Billed To Date:	None and Coordin	Task  2,223,913.00 2,162,380.01 2,162,380.01	Outstanding Invoice		Anticipated Completion	97%
Outstanding Issues:  East Loop EA  Project Management a  WA Amount:  Billed To Date:  Paid To Date:	None and Coordin	Task  2,223,913.00 2,162,380.01 2,162,380.01	Outstanding Invoice		Anticipated Completion	97%
Outstanding Issues:  East Loop EA  Project Management a  WA Amount:  Billed To Date:  Paid To Date:	None and Coordin	Task  2,223,913.00 2,162,380.01 2,162,380.01	Outstanding Invoice		Anticipated Completion	97%

2-B PRESENTATION OF THE STATUS OF THE SH 550 DIRECT CONNECTOR PROJECT FOR MAY 2015



## SH 550 CONSTRUCTION UPDATE





June 11, 2015





HNTB Corporation
The HNTB Companies
Engineers Architects Planners

TBPE FIRM REGISTRATION NO.: 420

# SH 550 Key Dates



-PRE-CONSTRUCTION MEETING	2-20-2013
-NTP ISSUED	2-23-2013

-ACTUAL CONST. START DATE 3-4-2013

-FEDERAL AUDIT IN FIELD 5-20-13

-98.0 % COMPLETE AS OF 5-22-15

-MILESTONE START DATE (IH 69 LANE CLOSURE) 11-1-13

-LOCAL LET GOV. PROCEDURES AUDIT 8-1-13

-TxDOT AUDIT- 30% 9-10-13 to 9-12-13

-TxDOT ENVIRONMENTAL INSPECTION-INITIAL 2-18-2014

-IH 69 LANE CLOSURE FOR DIRECT CONNECTOR BENT 7-8-14 CONSTRUCTION (BETWEEN MAINLANES)

-PROJECTED CONST. END DATE -ORIGINAL

9-22-2014









# SH 550 Key Dates



-TxDOT AUDIT- 60%-90%	9-11-2014
TxDOT ENVIRONMENTAL INSPECTION FOLLOW-UP	9-11-2014
-PROJECTED CONST. END DATE- CO#2(ADDITIONAL TIME)	11-13-2014
-PROJECTED CONST. END DATE-REVISED(APR. 2015)	5-1-2015
-CHANGE ORDER #3-LEVEL-UP REPAIRS COMPLETED	1-27-15
-CHANGE ORDER #4-FM 1847 OP SBML BRIDGE DECK REPAIR COMPLETED	2-10-15
-CHANGE ORDER #5-I69E ML REVISED MILL/OVERLAY QTYS COMPLETED	3-26-15
-CONTRACTOR COMPLETED ALL ITEMS -TIME SUSPENSION	5-22-15
-RECEIVED TXDOT PUNCHLIST LETTER	5-26-15









# Major Items of Work Completed



ITEM	UNIT	PROJECT TOTAL	QUANTITY COMPLETED TO DATE	% COMPLETE TO DATE
CONCRETE PILES	EA	598.00	598.00	100.0%
BRIDGE FOOTINGS	EA	58.00	58.00	100.0%
BRIDGE COLUMNS	EA	58.00	58.00	100.0%
CAPS FORMED AND POURED	EA	38.00	38.00	100.0%
CONCRETE BEAMS	LF	28,433.31	28,433.31	100.0%
STEEL GIRDERS	LB	1,065,198.00	1,065,198.00	100.0%
RETAINING WALLS (MSE)	SF	33,549.00	33,549.00	100.0%
DRILLED SHAFTS	EA	16.00	16.00	100.0%









# Major Items of Work Completed



ITEM	UNIT	PROJECT TOTAL	QUANTITY COMPLETED TO DATE	% COMPLETE TO DATE
EMBANKMENT	CY	305,077.00	305,077.00	100.0%
REINFORCED CONC SLAB	SF	245,188.00	245,188.00	100.0%
CONC PAVEMENT CRCP 12"	SY	75,246.00	75,246.00	100.0%
нот міх	TON	16,501.00	16,501.00	100.0%













EROSION CONTROL BLANKETS- LOOKING NORTH





L & G Engineering Laboratory

Geotechical • Construction Material Testing









HI-MAST WIRE PULL- LOOKING SOUTH





 ${\sf L\&G}$  Engineering Laboratory

Geotechical • Construction Material Testing





HNTB Corporation
The HNTB Companies
Engineers Architects Planner

TBPE FIRM REGISTRATION NO.: 420





HIGH MAST DURING STEADY BURN TEST





L & G Engineering Laboratory

Geotechical · Construction Material Testing











### HIGH MAST LAMP INSTALLATION







## Sub. of Pay Est. # 27 – MAY 2015

Estimate No. 27



			CO #2 Approved:
	Original Contract Days	565	618 Revised Contract Days
	Days Added by Change Order	0	53
			Revised Total Contract
	Total Contract Time	565	618 Time
d	Contract Days Previously Billed	568	
	Contract Days this Period	30	
	Days Remaining	0	-126 Liquidated Damages
	% Contract Time Used	100.0%	119.3% Revised Time Used

Quantities for May are Preliminary and Subject to Change upon Final Estimate Review.

Contract Days Previously Billed	568			THE REAL PROPERTY.	
Contract Days this Period	30				
Days Remaining	0	-126	Lio	uidated Damag	es
% Contract Time Used	100.0%			vised Time Use	
Contract Amount			\$	44,203,090.25	
Additional Change Order #2 Dollars			\$	34,000.00	
Revised Contract Amount			\$	43,807,804.19	
Previous Payments			\$	42,325,065.60	
Balance Due this Estimate			\$	11,499.50	
Liquidated Damages this Estimate	27 days @ \$ 4,0	000/day	\$	108,000.00	
Liquidated Damages to Date	153 days @ \$ 4,0	000/day	\$	612,000.00	
Net Amount Earned to Date			\$	42,336,565.10	
Percentage of Contract Billed to Date					98.0%
Balance of Contract			\$	1,471,239.09	





L&G Engineering Laboratory

Geotechical • Construction Material Testing





## ADDITIONAL PROJ. COSTS SUMMARY



ш	Section 1						
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Change Order #1 Completed -\$16,900.00

**Traffic Control Revision** 

Change Order #2 Completed \$34,000.00

**Additional Contract Time** 

Change Order #3 Completed \$60,391.36

Bridge Approach Level-Ups, FM 1847, etc.

Change Order #4 Completed \$191,485.84

Bridge Deck Repair-FM 1847 SBML

Change Order #5 Completed -\$395,286.06

169E ML Revised Mill/Overlay Quantities

Change Orders Total Cost -\$126,308.86

LIQUIDATED DAMAGES

153 Days @ \$4,000.00/Day -\$612,000.00

ADDITIONAL COSTS SUMMARY TO DATE -\$738,308.86









## Local Project Staffing



## **BASED ON MAY ESTIMATE**

Local (RGV) Contractor Personnel – 8 Daily FTE's

Non-Local (RGV) Contractor Personnel – 0

Local (RGV) CM Personnel – 1 Daily FTE's

Total Personnel – 9 Daily FTE's









## Local Project Staffing



## **BASED ON MAY #27**

Total Paid to Date (MAY 2015 Estimate) - \$42,336,565.10

**Local (RGV) Contractor Payments – \$36,282,436.29** (85.7%)

Non-Local (RGV) Contractor Payments - \$6,054,128.80 (14.3%)

Quantities for May are Preliminary and Subject to Change upon Final Estimate Review.









2-C PRESENTATION OF THE MARKETING EFFORTS FOR THE MONTH OF MAY 2015

# June 2015 Board Meeting Marketing Report Michelle A. Lopez Marketing & Communications Director



#### 1. SH 550 DIRECT CONNECTOR ADVERTISING

a. Everything has been paid for to begin marketing as soon as we know when SH 550 opens. Waiting for the green light to proceed.

#### 2. TOLL VIOLATORS PROSECUTION MARKETING STRATEGY

#### a. Objective

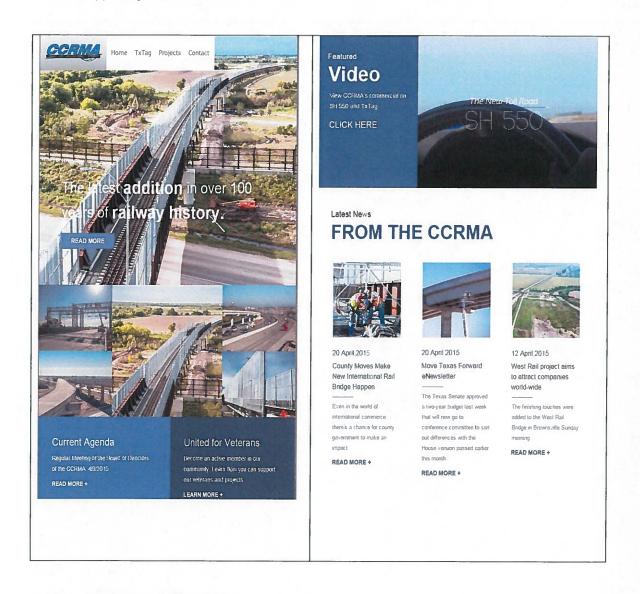
- i. The Cameron County Regional Mobility Authority (CCRMA) will be looking to inform and educate drivers who have received toll bills since the opening of the State Highway 550 (SH 550) and have been repeatedly unpaid. The objective of this initiative will be to promote the full payment of unpaid toll bills to avoid collection and court processes.
- b. Marketing Strategies- The following strategies have been selected and prepared.
  - i. Immediate Press Release- Press releases will be sent to all news media outlets to increase viewer awareness in regards to the prosecution efforts the CCRMA will initiate.
  - ii. Website Resource Tab Specialized to Educate and Promote Toll Bill Payment- The Toll Bill tab in CCRMA's website will be updated with an interactive module explaining how toll bills are processed. Within the tab, all available resources will be accessible to visitors to provide the customer support needed. The tab will also contain analytical code to provide us with insight on how many clicks are being driven the MSB's toll payment portal.
  - iii. Social Media Advertising- CCRMA's social networking sites will aggressively promote toll payments of toll bills. Advertising efforts will also be focused on this initiative. A "Call to Action" link will be setup on Facebook to monitor toll bill payment activity to MSB's portal. Adverts will be running to capture email addresses of local residents to receive notifications and reminders of unpaid toll bills with the objective of promoting full payment. All efforts will have analytical values produced to observe and monitor effectiveness.
  - iv. Email Database Implementation- CCRMA's email database will be further developed to promote toll payments through MSB's portal as well as directing traffic to the Toll Bill resource tab in CCRMA's website. Through the three-month initiative, our email database should expand to accommodate future marketing initiatives the CCRMA may produce. Weekly emails will be sent to educate, promote, and ultimately fulfill any unpaid toll bills before they enter collections.
- c. **Budget** The following are projected budgets for each marketing strategy that was mentioned previously with the intent of delivering results to the CCRMA

#### i. Strategy

- Social Media Advertising- An increase in social networking advertising is requested to promote aggressively this campaign.
- Cost- \$400 per month
- Social Media Advertising budget is for the span of 3 months.

#### 3. CCRMA NEWSLETTER:

- a. We have begun distribution of our monthly newsletter.
- b. The newsletter will reflect recent articles regarding CCRMA, its projects and other things happening with CCRMA.



#### 4. SOCIAL MEDIA MARKETING-

a. Facebook- At the moment, we are still waiting for the completion of CCRMA's Community Outreach Network as well as all donors for United for Veterans for Facebook promotions. News media has been low and current planning for Prosecution Plan is still in development. Although minimal promotion was performed in Facebook we still saw an increase in page likes due to direction of traffic from CCRMA's website and promotion done by Entravision. We expect the current database to increase and new features to be implemented to monetize on the current fan base that the CCRMA has established thus far.

Page Likes: 3,865 Total Page Likes 11.1% from last month

New Page Likes: 45 New Page Likes \$14.4% from last week

• Post Reach: 1,858 Total Reach \$100.4% from last week

b. Twitter- We now have a total of 2,397 followers on Twitter.

#### 5. WEBSITE-

a. CCRMA's growth was still evident throughout the month of May. There is still an overwhelming amount of new visitors every month in comparison to returning. A dramatic increase was observed this month (3,467 visitor increase), primarily due to Google AdSense, third-party outlets such as Entravision, and search engine results (SEO). Web traffic is still projected to increase as new marketing initiatives are implemented and an increase in social networks promotion is initiated.

Avg. Page views/Month: 18,797

Pages/Session: 2.34 % New Sessions: 72.34%

New Visitor vs. Returning Visitor: 72.3% / 27.7%

Regional Visits based on Traffic (US):

Brownsville	13,023 visits per month
McAllen	1,899 visits per month
Mission	1,084 visits per month
Harlingen	865 visits per month
Pharr	617 visits per month
San Benito	339 visits per month
Weslaco	310 visits per month
Edinburg	257 visits per month
SPI	211 visits per month
Donna	192 visits per month

List of Regions based on Traffic (MX): 6,773 visits per month

Tamaulipas 45.98% = 3,114 visits per month

- Matamoros

- Reynosa

Nuevo Leon 26.12% = 1,769 visits per month

Federal District 7.63% = 516 visits per month

- Mexico City

Coahuila 6.18% = 418 visits per month

#### Traffic Acquisition:

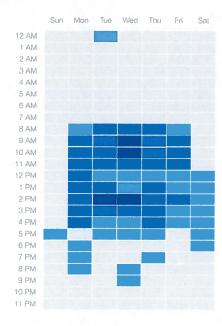
Direct	49.81%
www.ccma.org	89.94%
www.ccma.org/about	2.52%
Referral	25.33%
www.co.cameron.tx.us	50.14%
www.knvotv48.com	15.89%
www.txdot.gov	7.12%
Organic Search	11.30%
Google	76.90%
Bing	14.67%
Yahoo!	6.52%
Social	6.94%
Facebook	66.18%
Twitter	33.82%

**Keywords used to search**: ccrma, cameron county rma, cameron county regional mobility authority, ccrma.org, ccrma board meetings, ccrma texas, ccrma projects

#### Time slots:

Darker blue time slots represent when traffic is the heaviest to the website. Light blue represents low web traffic.

Key areas to consider: Tuesday at 2PM, Wednesday at 9AM-10AM and 2PM is when CRMA receives the most web traffic.



#### 1st Level of Interaction:

www.ccrma.org www.ccrma.org/projects/sh550 www.ccrma.org/projects/westrailrelocation www.ccrma.org/txtag

These are the pages that have captured the most traffic. Once users visit this page, the following levels have been the next pages that they have clicked on.

#### 2nd Level of Interaction:

www.ccrma.org/projects/spi2ndaccess www.ccrma.org/projects/sh550 www.ccrma.org/travel www.ccrma.org/about/agendas www.ccrma.org/txtag/

#### 3rd Level of Interaction:

www.ccrma.org/ www.ccrma.org/projects/spi2ndaccess/resources www.ccrma.org/faq www.ccrma.org/projects/sh550 www.ccrma.org/projects/westrailrelocation

#### 6. TXTAG MOBILE UNIT / UNITED FOR VETERANS CAMPAIGN-

- Multiple dealerships have agreed with the collaborative marketing efforts the CCRMA is currently trying to initiate. A new donor has been added to the list of United for Veterans supporters (BOGGUS FORD) and we expect to receive additional donations in the upcoming weeks.
- The CCRMA was able to attract a number of organizations to assist in marketing both projects and payment options. Such organizations include, *Tipotex*, *Boggus Ford*, *Bert Ogden Motors*, *Cardenas Motors*, and *CyClobia Brownsville*. Said organizations have pledged collaboration in promoting CCRMA's projects and payment options for their followers. As a supplement, said organizations are also aware of our mobile unit and our United for Veterans program. *Boggus Ford* has also become a donor for this initiative, providing the CCRMA with \$250 this fiscal year. All organizations have opened their doors with events in which the CCRMA can participate for free and setup mobile units to convert drivers into TxTag or potential PToll users. As we progress into the summer months, the CCRMA will be supplying a large amount of resources to drivers and residents to better its brand and customer engagement. RGV | Spotlight™ will be performing a brand audit by September to verify its marketing initiatives in respect to brand awareness for the CCRMA.
- We had our TxTag Mobile Unit at the county's vehicle registration office on May 29<sup>th</sup> and June 1<sup>st</sup>.

#### 7. IN THE MEDIA:

- a. <a href="http://www.themonitor.com/news/local/pharr-considering-toll-collection-system-partnership/article\_52efb93a-019b-11e5-9023-e7f215d72e2a.html">http://www.themonitor.com/news/local/pharr-considering-toll-collection-system-partnership/article\_52efb93a-019b-11e5-9023-e7f215d72e2a.html</a>
- b. <a href="http://www.valleymorningstar.com/news/local\_news/article\_d97fb322-08cd-11e5-ad87-9bbd30ef07d1.html">http://www.valleymorningstar.com/news/local\_news/article\_d97fb322-08cd-11e5-ad87-9bbd30ef07d1.html</a>

APPROVAL OF CLAIMS

Invoices Selected for Payment - Claims to be Paid

Vendor ID	Vendor Name	Invoice Number	Cash Required	Invoice/Credit Description
Adrian	Adrian Rincones	AR 6.5.15	862.32	Adrian travel for meeting with James Bass of TxDot
Anderson Columbia	Anderson Columbia Co., Inc	3622-01-003 - 27	11,499.50	Construction on SH550 for May 2015
Cameron County	Cameron County	CC Toll 2015	297.40	Reimbursement to Cameron County for Toll Payment
Culligan	Culligan of the Rio Grande Valley	320895 - 5/28/2015	39.47	Water service for Rancho Office
Fagan Consulting	Fagan Consulting LLC	BOS-15-05	7,644.00	Development of RFP for BOS
Fagan Consulting	Fagan Consulting LLC	IOP-15-05	4,243.62	Development of RFP for BOS
Fagan Consulting	Fagan Consulting LLC	LH-15-05	756.00	Development of Local Host
Fagan Consulting	Fagan Consulting LLC	OS-15-05	5,435.00	Toll Operations Support for Direct Connect ILA
Fagan Consulting	Fagan Consulting LLC	RFP 15-05	20,096.00	Development of RFP for BOS
GES	Gonzalez Engineering & Surveying, Inc.	205009	4,748.00	Survey and Parcel work for April 2015
GES	Gonzalez Engineering & Surveying, Inc.	205010	6,963.00	Survey and Parcel work West Rail
HNTB	HNTB CORPORATION	116-40619-PL-049	39,605.48	GEC Oversight of SH32 Project May 2015
HNTB	HNTB CORPORATION	6-62837-PL-001	40,251.00	Services performed on TRZ's 3-5
HNTB	HNTB CORPORATION	6-62837-PL-004	23,123.84	International Advisor Services
HNTB	HNTB CORPORATION	6-62837-PL-005	48,577.20	SH32 Environmental and Route Studies May 2015
JL Mechanical	JL Mechanical Air Conditioning	06/01/2015	900.00	New AC Compressor and installation for Toll Cabinet NB 1847
Michelle Lopez	Michelle Lopez	ML May 2015	282.33	May Mileage Reimbursement Marketing Director
PUB	Public Utilities Board	600710 5/28/15	302.14	Utilities on SH550
RGV Spotlight	RGV Spotlight	INV-0A12962B	1,584.56	Office Furniture for Rancho Office
RGV Spotlight	RGV Spotlight	REIM-CCRMA-005B	649.29	CCRMA Signage on New Office
S&B	S&B Infrastructure, LTD	U1965-28	3,106.36	Construction Mgmt on SH550
Terminex	Terminex	343839278	54.54	Pest control treatment at Rancho Office
The Rentrfro Law	The Rentfro Law Firm, PLLC.	018851	1,228.80	Legal Support for West Rail ROW for May 2015
The Rentrfro Law	The Rentfro Law Firm, PLLC.	018852	1,760.43	Legal Support for West Rail ROW for May 2015
The Rentrfro Law	The Rentfro Law Firm, PLLC.	018853	2,153.31	Legal Support for West Rail ROW for May 2015
The Rentrfro Law	The Rentfro Law Firm, PLLC.	018854	3,414.66	Legal Support for West Rail ROW for May 2015
Time Warner Cable	Time Warner Cable Business Class	4866 - June 2015	703.75	TWC phone and Internet Services
Report Total			230,282.00	



## MEMORANDUM

TO: Chairman and Board Members

FROM: Pete Sepulveda, Jr. 🚫

RE: Claims – Item 4A

**DATE:** June 11, 2015

Claims listed below are being presented for consideration and payment.

#### The Claims include:

- Adrian Rincones Travel Reimbursement to Austin to meet with CFO TxDOT James Bass on June 4<sup>th</sup> and 5<sup>th</sup>.
- Anderson Columbia Construction on SH 550 for May 2015
- Cameron County Toll Refund Due (Toll Error Breakdown)
- Culligan Water Water, Deposit, Fuel Surcharge, Water Delivery and Cooler Rental at Rancho Viejo Office for June 2015
- Fagan Consulting Back Office System Services for May 2015, Back Office Phase II RFP, International Bridge Interoperability for May 2015, Implementation of Local Host Services for May 2015 and Direct Connector Toll ILA oversight and coordination support for May 2015
- G-E&S Rail Survey, Descriptions and Map Parcels for West Rail
- HNTB Transportation Reinvestment Zone No. 3-5 from February 21 through May 22, 2015, International Advisor Services from March 28 through May 22, 2015, SH 32 Environmental Services & Coordination from April 25 through May 22, 2015, SPI Phase 3A from April 25 through May 22, 2015 and SH 32 GEC Oversight from December 27, 2014 through May 22, 2015
- Locke Lord Legal Services for March 2015, Legal Services of Legislative Support for March 2015, Legal Services for SH 550 for March 2015 and Legal Services for SPI Project for March 2015
- JL Mechanical Air Conditioning Replace burned compressor at SH 550 Toll Booth
- Michelle Lopez Mileage Reimbursement for May 2015
- PUB Utilities on SH 550
- Rentfo Law Firm West Rail Services for May 2015
- RGV Spotlight Picture Frames and PVC Wall Signage & Installation
- S&B Infrastructure SH 550 DC Construction Management for May 2015
- Terminix Rancho Viejo Office Exterior General Pest Control for March 2015
- Time Warner Cable Internet and Phone for Rancho Viejo Office

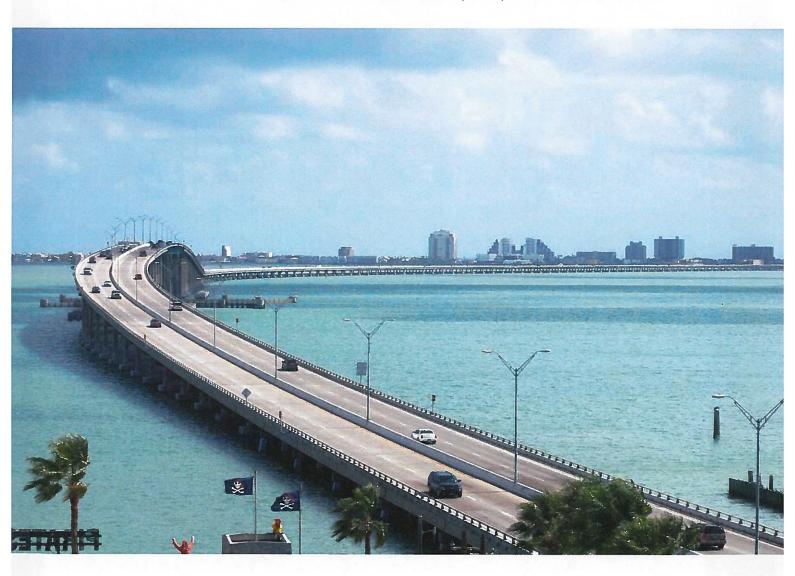
I recommend approval of the invoices.

4-B CONSIDERATION AND APPROVAL OF FINANCIALS STATEMENTS **FOR MAY 2015** 



## **May 2015 FINANCIAL STATEMENTS**

Pete Sepulveda Jr. Executive Director Jesus Adrian Rincones CPA, CFE, Chief Financial Officer



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Balance Sheet As of 5/31/2015 (In Whole Numbers)

	Current Year
ASSETS	
Current Assets:	
Cash and cash equivalents	
CCRMA Claims Account	228,804
CCRMA Operating Fund	3,546,330
Toll Operators Cash	60
TxTag - Replenishment Account	1,086
CCRMA Bond/Debt Funds	1,102,736
Total Cash and cash equivalents	4,879,016
Restricted cash accounts - debt service	,,-
CCRMA Toll Revenue Funds	12,387
2010 A & B Pledged Revenue Funds	184,551
2010A 2014 Refunding Series	184,550
2010 A Debt Reserve	1,038,587
2010 A Debt Service	248,269
2010 B Debt Reserve	1,218,154
2010 B Debt Service	84,820
2012 Bond CAPI funds	144,323
2012 Bond Operating Fund	129,272
2012 Bond Project Funds	4,299,162
2012 Bonds Rate Stabilization Fund	990,326
2012 Bond Pledged Revenue	37,412
2012 Bonds Debt Service	339,858
2014 Refunding Series Escrow Account	671
Total Restricted cash accounts - debt service	8,912,343
Accounts receivable	0,512,545
Vehicle Registration Fees - Receivable	585,020
Total Accounts receivable	585,020
Accounts receivable - other agencies	303,020
Accounts Receivable - Other Agencies	14,344
Total Accounts receivable - other agencies	14,344
Total Current Assets:	14,390,723
Non Current Assets:	14,550,725
Capital assets, net	
Land & Right of Way	40,000
Buildings	236,557
Improvements	29,603
Furnishings & Equipment	4,400,038
Accumulated Depreciation-Furnishings & Equipment Software & Technology	(515,816) 117,582
Accumulated Depreciation Software & Technology	(3,958)
Infrastructure & Utilities	12,958,232
Accumulated Depreciation-Infrastructure	(647,912)
Total Capital assets, net	16,614,326
Capital projects in progress	10,017,320
CIP - Planning & Coordination	552 552
CIP - Praiming & Coordination  CIP - Preliminary Engineering & Design	552,553 3,352,533
CIP - Environmental Studies	14,061,878
CIP - Mitigation	274,902
CIP - Right of Way	77,055
CIP - Utilities CIP - Construction	26,242
CIC - CONSTRUCTION	46,385,169

Balance Sheet As of 5/31/2015 (In Whole Numbers)

	Current Year
CIP - Construction Management	2,696,730
CIP - Direct Legal Costs	520,821
CIP - Capitalized Interest	3,239,713
CIP - Direct Administration	128,803
CIP - Indirect Administration and Overhead	585,044
Total Capital projects in progress	71,901,443
Other assets	
Other Assets	41,895,820
Total Other assets	41,895,820
Unamortized bond prepaid costs	
2012 Bonds Prepaid Insurance	116,364
2014 Bond Prepaid Insurance	12,098
Total Unamortized bond prepaid costs	128,462
Total Non Current Assets:	130,540,051
Total ASSETS	144,930,774
LIABILITIES	
Current Liabilities	
Accounts payable	
AP - Operations	107,998
AP - Project Exenditures	1,037,867
Total Accounts payable	1,145,865
Accrued expenses	
TxTag Customer Deposits	297
Toll Refunds from MSB	1,961
Accrued Expense	477,495
Total Accrued expenses	479,753
Payroll liabilities	
Federal Tax Withholding	7,141
Payroll Tax Payable	5,549
Retirement Contribution Payable	3,014
Health Insurance Payable	600
Aflac Employee Liabilities	469
Dental Insurance Payable	126
Employee Vision Insurance	50
Total Payroll liabilities	16,949
Deferred revenue	
UFV Fund Deposits	850
Deferred Revenue	3,567
Total Deferred revenue	4,417
Total Current Liabilities	1,646,984
Non Current Liabilities	
Due to other agencies	
Cameron County	167,500
Due to other Govts	2,014,428
Total Due to other agencies	2,181,928
Due to TxDot	
Union Pacific - West Rail Project	26,284,014
Union Pacific - Olmito Switchyard	9,844,058
TxDot FAA - South Padre Island	10,573,364
TxDot FAA - West Parkway	2,244,589
Total Due to TxDot	48,946,025

Balance Sheet As of 5/31/2015 (In Whole Numbers)

	Current Year
Long term bond payable	
2010A Bonds Payable	4,480,000
2010A Unamortized Premium	64,212
2010B Bonds Payable	15,535,000
2012 Bonds Payable	40,000,000
2012 Unamortized Premium	4,160,407
2014 Bonds Payable	5,000,000
2014 Bond Premium	155,424
2010A Refund Series 2014	6,325,000
2010A Refund Premium Series 2014	137,092
2015 CO Bonds	4,500,000
2015 CO Bonds Discount	(39,559)
Total Long term bond payable	80,317,576
Total Non Current Liabilities	131,445,529
Total LIABILITIES	133,092,513
NET POSITION	
Beginning net position	
	7,812,522
Total Beginning net position Changes in net position	7,812,522
	4,025,739
Total Changes in net position	4,025,739
Total NET POSITION	11,838,261
TOTAL LIABILITIES AND NET POSITION	144,930,774

Statement of Revenues, Expenditures And Changes in Net Assets - Unposted Transactions Included In Report From 5/1/2015 Through 5/31/2015 (In Whole Numbers)

	Current Period Actual	Current Year Actual	YTD Budget - Original	YTD Budget Variance - Original
One-seline Develope				
Operating Revenues	251 665	2.012.205	2 000 000	(006.715)
Vehicle registration fees Toll revenues	251,665	2,013,285	2,900,000	(886,715)
	24,043	233,608	553,472	(319,864)
TRZ revenue	0	378,840	425,000	(46,160)
Other revenue		330,262	500,000	(169,738)
Total Operating Revenues	275,708	2,955,996	4,378,472	(1,422,476)
Operating Expenses				
Personnel costs	44,036	417,766	584,900	167,134
Professional services	0	22,000	25,000	3,000
Contractual services	11,600	191,506	533,679	342,173
Debt interest	0	2,231,995	4,518,871	2,286,876
Advertising & marketing	4,270	46,969	55,500	8,531
Data processing	402	5,891	10,000	4,109
Dues & memberships	100	13,580	14,500	920
Education & training	0	2,798	11,000	8,202
Fiscal agent fees	5,000	13,466	15,000	1,534
Insurance	0	25,347	50,000	24,653
Maintenance & repairs	1,799	6,005	15,000	8,995
Office supplies	1,944	23,479	25,250	1,771
Road maintenance	11,711	114,035	130,000	15,965
Rent	458	4,671	8,000	3,329
Toll services	3,417	51,291	383,472	332,181
Travel	993	25,413	40,000	14,587
Utilities	2,513	11,976	20,000	8,025
Total Operating Expenses	88,243	3,208,187	6,440,172	3,231,985
Non Operating Revenue				
Interest income	463	6,641	0	6,641
Other Financing sources	0	0,041	2,061,700	(2,061,700)
Total Non Operating Revenue	463	6,641	2,061,700	(2,055,059)
Total Non Operating Revenue	703	0,041	2,001,700	(2,033,039)
Changes in Net Assets	187,927	(245,550)	0	(245,550)
Net Assets Beginning of Year				
_	(433,477)	0	0	0
Net Assets End of Year	(245,550)	(245,550)	0	(245,550)

Statement of Cash Flows As of 5/31/2015

	Current Period	Current Year
Cash Flows from Operating Activities		
Receipts from Vehicle Registration Fees	799,264.84	2,096,094.99
Receipts from Toll Revenues	15,542.76	465,618.26
Receipts from TRZ Revenue	0.00	0.00
Payments to Vendors	(44,207.35)	(558,426.39)
Payments to Employees	(50,259.40)	(407,130.91)
Total Cash Flows from Operating Activities	720,340.85	1,596,155.95
Cash Flows from Capital and related Financing Activities		
Acquisitions of Property and Equipment	(38,174.62)	(791,703.48)
Receipts from Grants and Other income	929,833.98	1,486,282.70
Payments on Interest	0.00	(2,231,994.59)
Acquisitions of Construction in Progress	(1,490,868.46)	(15,205,914.82)
Principal Payments on Bonds	0.00	3,922,532.85
Proceeds from TxDot FAA	0.00	1,755,157.03
Proceeds from Other Governments	19,300.63	839,780.39
Total Cash Flows from Capital and related Financing Activities	(579,908.47)	(10,225,859.92)
Net Increase (Decrease) in Cash & Cash Equivalents	140,432.38	(8,629,703.97)
Beginning Cash & Cash Equivalents		
	13,650,926.58	22,421,062.93
Ending Cash & Cash Equivalents	13,791,358.96	13,791,358.96

Capital Projects in Progress - Unposted Transactions Included In Report From 5/1/2015 Through 5/31/2015 (In Whole Numbers)

	Current Period Actual	Current Year Actual	YTD Budget - Original	YTD Budget Variance - Original
Capital Projects				
South Padre Island 2nd Access	130,908	1,559,969	1,400,000	(159,969)
West Parkway Project	13,417	58,096	800,000	741,904
Outer Parkway	0	17,959	2,500,000	2,482,041
FM 1925	13,417	59,413	1,000,000	940,587
West Rail Relocation	44,071	1,842,946	1,000,000	(842,946)
Olmito Switchyard	0	75,753	0	(75,753)
SH 550	3,106	8,461,845	18,104,600	9,642,755
SH 32 (East Loop)	88,183	203,966	7,000,000	6,796,034
FM 803	13,417	66,001	50,000	(16,001)
Port Isabel Access Rd	0	0	100,000	100,000
FM 509	0	0	1,000,000	1,000,000
North Rail Relocation	0	0	400,000	400,000
Total Capital Projects	306,519	12,345,947	33,354,600	21,008,653

Statement of Revenues and Expenditures - Unposted Transactions Included In Report From 5/1/2015 Through 5/31/2015
(In Whole Numbers)

		Current Period Actual	Current Year Actual	YTD Budget - Original	YTD Budget Variance - Original
Capital Projects					
South Padre Island 2nd Access	2000				
CAPITALIZED PROJECT COSTS	01CAP				
CIP - Planning & Coordination	15100	0	97,423	0	(97,423)
CIP - Preliminary Engineering &	15110	0	9,351	400,000	390,649
Design					
CIP - Environmental Studies	15120	100,958	1,339,006	1,000,000	(339,006)
CIP - Mitigation	15130	29,950	101,509	0	(101,509)
CIP - Direct Legal Costs	15300	0	12,680	0	(12,680)
Total South Padre Island 2nd Access		130,908	1,559,969	1,400,000	(159,969)
West Parkway Project	2025				
CAPITALIZED PROJECT COSTS	01CAP				
CIP - Environmental Studies	15120	0	0	800,000	800,000
CIP - Direct Legal Costs	15300	0	15,162	. 0	(15,162)
CIP - Direct Administration	15320	13,417	42,934	0	(42,934)
Total West Parkway Project		13,417	58,096	800,000	741,904
Outer Parkway	2050		,	,	,
CAPITALIZED PROJECT COSTS	01CAP				
CIP - Planning & Coordination	15100	0	12,200	500,000	487,800
CIP - Preliminary Engineering &	15110	0	0	1,000,000	1,000,000
Design					
CIP - Environmental Studies	15120	0	0	1,000,000	1,000,000
CIP - Direct Legal Costs	15300	0	5,759	0	(5,759)
Total Outer Parkway		0	17,959	2,500,000	2,482,041
FM 1925	2075				
CAPITALIZED PROJECT COSTS	01CAP				
CIP - Planning & Coordination	15100	0	0	350,000	350,000
CIP - Preliminary Engineering & Design	15110	0	0	350,000	350,000
CIP - Environmental Studies	15120	0	0	300,000	300,000
CIP - Direct Legal Costs	15300	0	16,479	0	(16,479)
CIP - Direct Administration	15320	13,417	42,934	0	(42,934)
Total FM 1925		13,417	59,413	1,000,000	940,587
West Rail Relocation	2100				
CAPITALIZED PROJECT COSTS	01CAP				
CIP - Planning & Coordination	15100	23,124	23,124	0	(23,124)
CIP - Mitigation	15130	0	2,582	0	(2,582)
CIP - Right of Way	15200	19,718	77,055	0	(77,055)
CIP - Construction	15220	0	1,319,204	1,000,000	(319,204)
CIP - Construction Management	15240	0	415,119	, , 0	(415,119)
CIP - Direct Legal Costs	15300	1,229	5,863	0	(5,863)
Total West Rail Relocation		44,071	1,842,946	1,000,000	(842,946)
Olmito Switchyard	2150	.,	-,,	_,,	(0.2/2.0)
CAPITALIZED PROJECT COSTS	01CAP				
CIP - Construction	15220	0	75,753	0	(75,753)
Total Olmito Switchyard		0	75,753	0	(75,753)
SH 550	2200	· ·	. 5/. 55		(10)155)
CAPITALIZED PROJECT COSTS	01CAP				
CIP - Preliminary Engineering & Design	15110	0	0	2,500,000	2,500,000
CIP - Mitigation	15130	0	71,975	0	(71,975)
CIP - Utilities	15210	0	0	604,600	604,600
CIP - Construction	15210	0	8,126,460	14,000,000	5,873,540
CIP - Construction Management	15240	3,106	259,170	1,000,000	740,830
CIP - Constitution Management CIP - Direct Legal Costs	15300	3,100 0	4,239	1,000,000	(4,239)
Total SH 550	13300				
FULAL SET SOU	11	3,106	8,461,845	18,104,600	9,642,755

Statement of Revenues and Expenditures - Unposted Transactions Included In Report From 5/1/2015 Through 5/31/2015 (In Whole Numbers)

		Current Period Actual	Current Year Actual	YTD Budget - Original	YTD Budget Variance - Original
SH 32 (East Loop)	2250				
CAPITALIZED PROJECT COSTS	01CAP				
CIP - Planning & Coordination	15100	48,577	163,142	500,000	336,858
CIP - Preliminary Engineering & Design	15110	21,328	21,328	5,000,000	4,978,672
CIP - Environmental Studies	15120	18,277	19,495	1,500,000	1,480,505
Total SH 32 (East Loop)		88,183	203,966	7,000,000	6,796,034
FM 803	2300				
CAPITALIZED PROJECT COSTS	01CAP				
CIP - Mitigation	15130	0	7,027	50,000	42,973
CIP - Direct Legal Costs	15300	0	16,039	0	(16,039)
CIP - Direct Administration	15320	13,417	42,934	0	(42,934)
Total FM 803		13,417	66,001	50,000	(16,001)
Port Isabel Access Rd	2400				
CAPITALIZED PROJECT COSTS	01CAP				
CIP - Environmental Studies	15120	0	0	100,000	100,000
Total Port Isabel Access Rd		0	0	100,000	100,000
FM 509	2450				
CAPITALIZED PROJECT COSTS	01CAP				
CIP - Preliminary Engineering & Design	15110	0	0	1,000,000	1,000,000
Total FM 509		0	0	1,000,000	1,000,000
North Rail Relocation  CAPITALIZED PROJECT COSTS	2500 01CAP				
CIP - Environmental Studies	15120	0	0	400,000	400,000
Total North Rail Relocation		0	0	400,000	400,000
Total Capital Projects		306,519	12,345,947	33,354,600	21,008,653

Toll Revenues and Expenditures - Unposted Transactions Included In Report From 5/1/2015 Through 5/31/2015

	Current Period Actual Current Year Actual		YTD Budget - Original	YTD Budget Variance - Original		
Toli Revenues						
Toll Revenue	8,849.80	91,858.74	170,848.00	(70,000,26)		
Toll Violation Revenue		· ·	· ·	(78,989.26)		
Ton Trondson Recorded	6,692.96	55,601.02	100,000.00	(44,398.98)		
Interop Revenue	8,500.00	86,148.50	282,624.00	(196,475.50)		
Pay by Mail Revenue	0.00	0.00	0.00	0.00		
Total Toll Revenues	24,042.76	233,608.26	553,472.00	(319,863.74)		
Toll Expenditures						
Toll services						
Toll Services	0.00	18,558.40	178,672.00	160,113.60		
Interop Collection Fees	0.00	5,312.73	19,800.00	14,487.27		
PBM Add on Fees	0.00	1,135.23	0.00	(1,135.23)		
PBM Image Review	3,417.26	26,284.75	175,000.00	148,715.25		
PBM Pre-Court Program	0.00	0.00	10,000.00	10,000.00		
Total Toll services	3,417.26	51,291.11	383,472.00	332,180.89		
Toll maintenance						
Maintenance - SH 550	11,711.00	114,035.29	130,000.00	15,964.71		
Total Toll maintenance	11,711.00	114,035.29	130,000.00	15,964.71		
Total Toll Expenditures	15,128.26	165,326.40	513,472.00	348,145.60		
Net Change in Toll Services	8,914.50	68,281.86	40,000.00	28,281.86		

4-C CONSIDERATION AND APPROVAL FOR NOTICE TO PROCEED WITH PURCHASE OF THE PROJECT HOST SERVER





#### **Document Control**

Document Name:	CCRMA Project Server Host Upgrade
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Project Title:	CCRMA Project Server Host Upgrade
Client:	Cameron County Regional Mobility Authority
Project Manager:	Mike Yager

## **Change Notice**

Revision#	Change Reason	Reviewer	QA By	Date Completed
1.0	Initial version.			03/17/2015

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#### 1 Overview

The CCRMA Project Host will include both a Primary and Secondary Host System, each with the same hardware platform and each using an Oracle 11g database with identical configuration, running on Linux. The Primary and Secondary Hosts will contain one database schema/instance for the Host Applications and a separate schema/instance for the Remote Operations Management System (ROMS). Collectively, the databases are known as the Transaction Processing System. The redundant host pair will operate with the Primary Host in an online configuration and the Secondary Host will be processing in parallel.

Transactions from the Lane Side System are streamed directly to each Host in independent parallel paths. The Secondary Host can seamlessly replace the Primary Host in the event of a failure or a disaster. Secondary processes would need to be manually directed to be online, but there is no data disruption. The Secondary Host will be used for data recoveries in the event the Primary Host is down, or in a disaster situation the Secondary Host can be transitioned to be the online Host with manual intervention.

The Project Host uses Oracle 11g in an "off the shelf" configuration and does not contain any special Oracle patches or custom applications. The database is installed per Oracle's documentation, and no special tuning procedures or third party products are used to alter the functionality. The Project Host does rely on the Oracle Recovery Manager (RMAN) product that allows the database to be backed up daily without taking the instance offline.

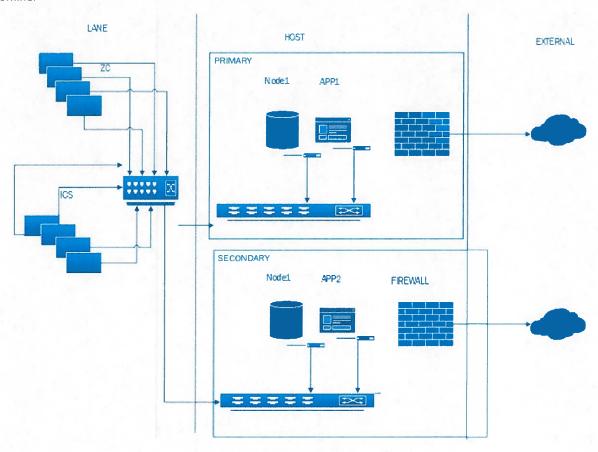


Exhibit 1-1: Sample Host Block Diagram





Every vehicle that is processed by the lane has a transaction associated with it. The transaction data is passed over to the database, from the lane, via a stored procedure call. The stored procedure in the database will apply duplicate checking and other various verifications against the data before it is stored in one or more Transaction tables.

The system is constructed using two redundant machines. The Host refers to the Primary Host; it is designed with maximum availability and reliability. The system is designed with a fully redundant database server referred to as the Secondary Host. Both the Primary and Secondary Host(s) are always online and receiving transactions from their respective Zone Controllers. In the case that the Primary Host/Zone Controller fails, the Secondary Host/Zone Controller would simply be re-configured to act as the Primary until recovery on the actual primary has completed.

All of the machines will be connected via a secure intranet using an IP-based network. The Host will be the primary file distribution machine. It will be responsible for transmission and verification of the files that are sent to the Lane Controllers (LC). Each LC uses a variety of configuration files, tag files and fare schedules. The Host will act as the primary gateway for this information, in the event of system failure the Secondary Host machine can be manually configured to perform these tasks.

The system is designed to support user workstations that are used in conjunction with a custom Graphical User Interface (GUI) to operate the toll system. Each of these workstations will be running current versions of the Microsoft Windows Operating system. The GUI is a web-based application that operates in a browser window. The GUI provides CCRMA with a customized interface to the configuration and reporting screens.

#### 1.1 Transaction Life Cycle

One of the core responsibilities of the Project Host is to ensure that each transaction is accounted and reaches a terminal state and is reconciled. This process flow is called the Transaction Lifecycle. This is the same transaction lifecycle has been deployed and operated in conjunction with the Texas Interoperability Hub (IOPHub) for CRRMA. This robust workflow design allows for maximum revenue collection though the IOPHub by processing transaction through both payment types: tag and image-based transactions. The workflow will also support the Phar Bridge system for tag processing.

At the heart of the Project Host is the Workflow Engine (WFE) module, which is a generic component that manages different workflow processes. In the case of the transaction aging, the WFE is configured with the statuses, transitions, and events that pertain to the process of transaction aging.

Using a WFE will provide improved visibility to track the state of each transaction at any given time, allowing better reporting on transaction status and reconciliation and providing a clearly defined path for each transaction, with consideration for all known possible outcomes.

The Project Host transaction module communicates with the WFE module to register a transaction, track the transaction through its various stages, until it reaches one of the terminal states. The WFE maintains the full lifecycle history of every transaction within the ETC System. The WFE actions can be triggered by various events, including file exchanges and timer component or by a business rule time constraint.

Each and every transaction identified at the lane is mapped to a workflow work item. The system's workflow process defines the lifecycle of a work item. The work item moves through different stages of its lifecycle until it reaches its terminal stage. When such a terminal stage is reached by a work item, the transaction attached to it is said to have completed its lifecycle. The Schneider Electric WFE and this design feature allow end to end auditability and traceability of event data through to transaction processing and reconciliation.





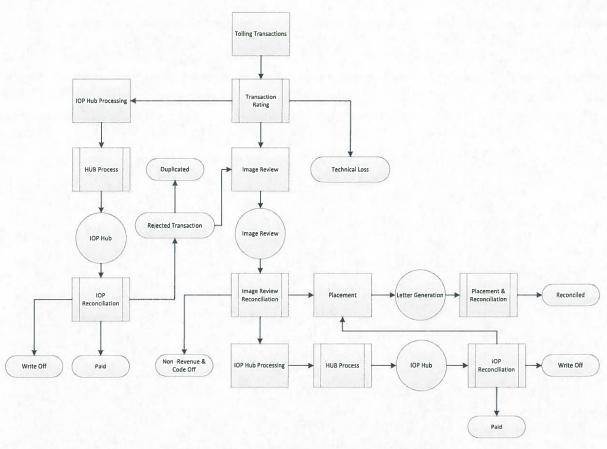


Exhibit 1.1-1: Transaction Lifecycle Workflow Diagram

The transaction lifecycle in Project Host starts when a transaction is brought to database from the toll zone controller (ZC). Once the transaction has been inserted in the database it is acknowledge and reported with confirmation back to the ZC System using guaranteed protocols. Now that the transaction is engaged in the transaction life cycle, the rating engine processes it to see if the transaction is associated with a valid tag recognized by the IOPHub or the **Phar Bridge**.

The transactions that are associated with a valid tag are pushed to a Pending for Tag stage. Transactions that do not have a valid tag are pushed to the Pending for Image Review stage. The Image Review process collects all such transactions and their associated images and forwards to an external process for image review. The image review process can be managed within the Host System or it can be managed by a third party.

Transactions in the Tag Stage will be sorted and evaluated in order, first by IOPHub and then by Phar Bridge, prioritizing valid IOPHUB tags. Valid IOPHUB tags will be sent to CTRMA to be processed by the IOPHub and will operate under CTMRA life cycle and Business Rules. The CTRMA interface will be described in following sections. The Valid Phar Bridge tags will be will be transmitted thought its own independent interface described below.

Phar Bridge Transactions that are accepted and paid will reach an ending stage in the transaction life cycle and will be fully reconciled and reportable. Phar Bridge Transaction that are rejected, by the bridge will follow the Pay By Mail lifecycle and will be sent to the Pending Image Review Stage to be processed by CTRMA.





#### 1.2 External Interfaces

The CRRMA tolling system includes several components that communicate with each other over various protocol and data structures. The Zone Controllers create transactions for every vehicle passing; the image capture stations capture the images. These data are then uploaded to the plaza host systems. These data are available for reporting, billing, image review, etc. This section explains how these various systems interface with each other within the tolling system and with the external systems. The robust architecture and organization provides the flexibility and scalability to interface to multiple diverse external systems without need to re-architect or significant development, when client needs change.

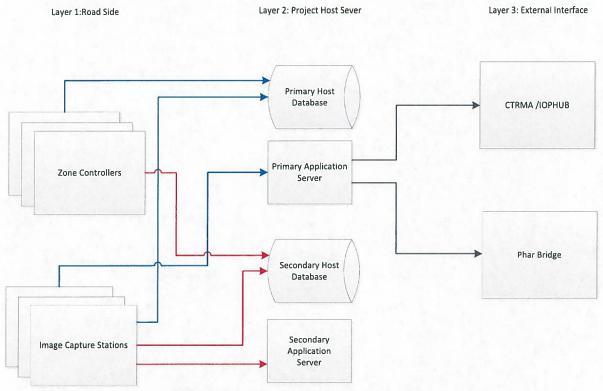


Exhibit 1.2-1: High Level Architecture and Data Flow

Exhibit 1.2.1 above provides a high level architecture of the tolling system components and the data flow. The systems are grouped into 4 layers. The tolling solution starts with the Zone Controllers and the Image Capture Stations on the road side, which forms the layer 1. This is where the transactions are formed and the images are captured. Layer 2 comprises of the Host (Database) Server, the Application Server and the Image Storage systems. Layer 2 is where the data is stored for further processing with the IOPHub, image processing and reporting. Layer 3 contains the Image Review. Layer 4 is the external CSC IOPHub or image-based tolls processing systems.

#### 1.2.1 Layer 1 - Roadside Interface

For every vehicle that passes through the lane the Zone Controller generates a Vehicle Transaction record and an AVI Payment record (when a tag read is available). The Zone Controller triggers the camera and sends the camera trigger event to the Image Capture Stations. The Image Capture Stations download the images from the cameras and correlates them with the transaction to form the Image Transaction record (containing the vehicle image





mapping information) and then download the images to the long term storage. The Zone Controller communicates the Vehicle Transaction and the AVI Payment records to the host server. The Image Capture Stations transmit the Image Transaction records to the host server.

Both the ZC and the ICS uses XML to format the data and transfers the data over the TCP protocol. On the host server, the inserter processes receives these XML messages and inserts them into the database. This communication is always active, meaning that the data from the road side is downloaded to the host server as soon as the data is available.

#### 1.2.2 Layer 2 - Project Host Server

The Project Host Server (PHS) consists of the Host Database server and the Application server where the images are stored. The PHS serves as the primary data repository for the entire system. Data generated by the road side, data received from the CSC, system configuration data, user configuration data. The database is sliced into several schemas based on the functional requirements. The schemas available are: ETCTRXREP is the revenue schema, ACLREP is the user account management, ROMSREP is the ROMS data, and WFEREP is used for workflow management.

The architectural design of the host system keeps focus on improving performance, scalability, data access and integration with other systems. This utilizes cutting-edge technologies and modern concepts that allow aligning the product with the current market vision and expectations. The main architecture follows the MVC pattern. It is an architectural pattern that splits interactions between users and applications into three distinct non-overlapping roles: Model, View & Controller. This separation of responsibilities facilitates the independent development, testing, and maintenance of each role – including providing modular scalability for client's evolving needs.

#### 1.3 External Interface

As described above the Project Host controls all external communications from the ETC System to third parties via the defined ICDs, which will include file exchange protocols. The IOPHUB and Phar Bridge process TVL and LVL files on Project Host and process the files in first in first out order. The CTRMA interface will be responsible for distributing TVL and LVL Files.

#### 1.3.1 CTRMA Interface

The CTRMA Host server will act as a gateway between the CCRMA tolling system and any external systems. The CTRMA host will appear to be transparent, as if the CRRMA host is communicating directly to the IOP HUB. The CTMRA Host server will run an Oracle database to host the transactions to be sent to CSC. The CTMRA Host server will also provide a drop box facility for the CSC to exchange files. The CTMRA Host server will also run its own web services interfaces.

Our web services client will communicate with the application server to query for the transactions that are in the IOP and insert them into the local database. When these transactions are inserted into the database they will be marked as "New" transactions.

Schneider Electric will use the current version of the IOP ICD. Transaction reconciliation from the IOP will be filter down from IOP through CTRMA. Transaction reconciliation can be performed at all three levels, CRRMA Host, CTRMA Host and IOP reports. Should CRRMA choose to interface directly with the IOP HUB, that configuration could be made with minor adjustments.

An operating system user account will be created on the host machine for the CSC and the CSC will use this account to login to this server to drop off the TVL and LVL files. The file system monitoring process will check for





incoming files every few seconds (which is configurable) and the files will be processed in the order they are received. The host system will expose a web service to load the external files and when a new file arrives the file system monitoring process will identify the type of file, perform preliminary verifications of the data and then invoke the web service call, which will load the file into the CTRMA database.

#### 1.3.2 Phar Bridge Interface

Schneider Electric has 20 years of experience developing ICDs with different entities and agencies. Schneider will support the TVL and Transaction file interface of the Phar Bridge.

All our external interfaces have included file-based systems as well as Web services. Schneider Electric considers any external interface to be a gateway into the system, and our experience ensures they are correctly designed, sandboxed, and protected to prevent revenue loss and enforce end-to-end auditability. All data transmissions will have acknowledgement and negative-acknowledgement (ACK/NACK) for each datum, message, or file as appropriate.

The proposed system design also accounts for the ability to reject files or data, notifying the external parties, based upon defined conditions or rules, providing feedback including error codes. ROMS provides direct automatic notification in the event of negative-acknowledgement or error condition. This assures that that no negative-acknowledgement or error condition goes unnoticed, because ROMS notifies the proper parties, ensuring the issue is handled correctly and in a timely manner. In addition to real time monitoring, each interface has its own reporting capabilities and dashboards to show file or information transfer over a period of time, working or processing queues, and historical transfer rates.

#### 1.4 Local Reporting

Schneider Electric's PHS solution includes a full suite of reports to meet the financial, and reconciliation needs of CCRMA. The proposed Host application provides robust transaction tracking. The System uses unique identifiers to organize event data. The end-to-end transaction tracking combined with unique identifiers provides powerful reporting capabilities. This includes the capability to audit down to the individual transaction level, providing research capability across the entire lifecycle of the transaction. This information is also reportable at an aggregate level, providing true reconciliation of critical transaction and financial data.

The Schneider Electric Project Host includes a comprehensive set of base reports for traffic, revenue, toll zone operations, auditing, and customer activity. All reporting is provided from data stored on the Host Database Server with report generation performed on the Host Application Server. Our web-based reporting interface provides flexible filtering tools for pinpointing and reporting on specific traffic and financial data. With intuitive navigation, end users (such as CCRMA's authorized staff) can drill down through reports to transaction details.

With the standard configuration, Detailed Transaction items may be filtered to aid in researching any anomalies, facilitate custom reports, answer questions, and provide a full audit trail of financial events and data. The reports will be based on the same CTRMA reports that CCRMA uses today. Schneider Electric will enhance the report to allow for auditability and transaction reconciliation for the Phar Bridge.

All the host reports defined in this document are generated based on the online, non-aggregated data. Reports can be generated on screen for review before exporting to PDF or text editor and Excel readable CSV format. The reporting module and graphical user interface will be available for user access 24/7, without any blackout periods. Users, with proper security permissions, can create reports and also subscribe to reports for distribution by email.

In general, all reports will have the same look and feel with variation in the content of the selected report. Each report will have CCRMA's logo in the upper left corner, as well as footer with the date and time the report was





printed, the page number, the number of pages and the version number of the report itself, plus the date definition (revenue date or calendar date).

All reports are designed with several aspects in mind. The first consideration is the ease and convenience to the user. A friendly and intuitive interface to the reports allows the user to select from a number of parameters including time range, lane number, user when necessary, and various other specific criteria dependent on the report type. This allows for very detailed information to be returned in the report, specific to the user's needs...

The second design perspective is expandability. Though only one plaza currently exists, the reports are set up in a way that accommodates expansion of the client's toll facilities if needed. Expansion of the reporting System to recognize additional locations does not require a software change; instead, the reporting automatically detects configuration changes within the database. This is an important feature, as it allows for a much smoother transition in the future if expansion on the toll system were to take place.

The last aspect is information. Reports are a fundamental way to inform CCRMA about what exactly is happening on the plaza. It is important to see the information, process it, and make decisions accordingly. Reports vary in purpose from high-level reporting to detailed audit reports and trails providing highly-detailed data and analytics. Reports have been created with this in mind, and structured in a way to make this feasible. The reporting tool allows for in-use drill down from higher level (summary) data to detailed transaction data with simple interface of clicking on the report's line items, which facilitates research and allows thorough visibility into the toll system information from annual or quarterly reporting, down to transactional data and events.

Schneider Electric's Host reports are organized in a hierarchy that is reflected in the user-interface. Each grouping of reports has its own pull down menu. The standard Host reports include the following:

- Reconciliation Reports
  - Daily Revenue Reconciliation
  - Daily Transaction Reconciliation
  - o Payment Reconciliation
  - Transaction Detail
  - Transmission Reconciliation
- Plaza Administration Reports
  - Lane Fare Schedule
  - Lane File Transfer History
  - System Health Report
- Revenue Reports
  - Non-Revenue by Agency
  - vToll by Lane
  - Code Offs by Lane
  - Plaza Transaction Detail
  - Transaction Summary
  - o Reconciliation Summary Report
- Traffic Reports
  - o Detailed Transaction
  - o ETC Penetration Statistics
  - o Transaction Disposition





#### 1.5 Data Retention

The detailed transaction data is to be retained online for period of 1 calendar year. Summarized traffic data at 5 minute resolution is to be retained for a period of at least 5 years. Traffic and revenue (expected) data will be summarized per lane and per day, per 5 minute interval. It will be continuously collected via database triggers as transactions happen and stored is summary tables.

The detailed transaction and summarized data will be stored in the host database. The purge process will delete daily the data older than 1 year from transactional (non-summarized) tables. Summarized tables will be cleared in similar fashion, except for data older than 6 years. This will ensure that 5 full years of summarized data are available for comparison (for example comparing revenue for years 2014 and 2009). Also, deletions on any original transaction records stored in the host database will only come from archive functionality.

The detailed transactions data is also buffered locally at the Zone Controller in circular buffer file. Size of the file is configurable and determines the length of time that before transaction data is overwritten by the new transactions. This buffer file also adds a level of redundancy to the transaction data, and can be used as a source of data recovery in the case of unexpected failures.

#### 1.6 Hardware

Schneider Electric designs our Project Host System with mandatory requirements for redundancy and availability using a pair of identically configured server configurations. Each Project Host server is a mirror image of the other and each operates independently and in parallel, receiving the same data simultaneously from each ZC/ICPS. If one Project Host were to lose power or connectivity, the other Project Host would continue to function normally with no loss of data.

#### 1.7 Future Growth

The proposed PHS system is based on a modular and scalable design to allow the CCRMA the flexibly to grow, whether by adding additional tolling locations / points and in their approach to tolling operations, such taking responsibly for Image-Based Toll Transaction Processing (Image Review and Pay By Mail Account Management).





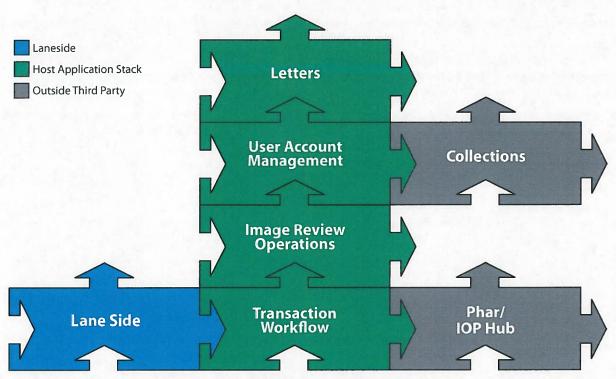


Exhibit 1.7-1: Optional CCRMA Modules

As represented in the graphic above CCRMA could take different operational responsibilities in modular form one at a time, from Image Review Operations, Pay By Mail Account Management, and Letter and Billing Management. There is no set path or particular order in which CCRMA must grow its operations due to the design of our PHS, these functional responsibilities could be accommodated in any order.. CCRMA operation could start first by managing their own Pay My Mail Process and operate under its own business rules, before taking on the Image Review Process.

#### 1.7.1 Image Review

The Schneider Electric Image Capture and Processing System (ICPS) system uses ALPR (Automated License Plate Recognition) software and manual reviewing tools to provide license plate information from images received from toll collection lanes in a continuous or intermittent stream. Additionally, the ICPS system can provide a full set of reports on confidence of image processing, accuracy performance of reviewers and cost per image.







Exhibit 1.7.1-1: Image Review Interface

Manual image review is the complementary quality component to License Plate Number Recognition. LPNR includes Optical Character Recognition (OCR) of license plate images from the lane side equipment, returning a result of a license plate number and a confidence rating for that LPN. Manual image review provides validation of license plate numbers independent of the OCR result. Using stand-alone review stations, data agents evaluate images using a GUI designed to allow fast, keyboard-driven review.

The image stations work with the central Image Based Tolls processing server to ensure images are matched with identity enough times (through a combination of LPNR and independent human review) to satisfy the configurable business rules (e.g. "an image must have an LPNR and one human match or three human matches").

- 1. The Image Processing Server receives a list of image transactions of vehicles to identify the license plate alpha-numeric and state. These images are related to a Tolling Host or VPS, for example.
- 2. For each transaction, the Image Processing system recovers all related images by connecting to the main image repository, which in this case, is the CCRMA Image File Server.
- 3. For each image, a workflow is initiated to process the image:
  - A filter decides if the image is suitable for automatic recognition.
  - · An automatic recognition engine (ALPR) is deployed.
  - After automatic processing, if the confidence level of the automatic recognition is not within tolerance, a business rule task determines which images require manual review. Manual review types are:
    - Fast Review
    - Full Review
    - o Quality Review
- 4. After the image processing workflow is complete, the result is given back to the external system.
- 5. Once the Image Processing System has properly identified the vehicle, the Plate Number, State, and Confidence Level, and other information related to the reviewer performance are returned to the Host.





#### 1.7.2 Image-Based Toll Transaction Processing System

Schneider Electric offers flexibility to integrate Image-Based Toll Transaction Processing systems seamlessly into our Project Host Server to support CCRMA's business needs. Our modular approach includes multiple installations using a variety of Image-Based Toll Processing (or Violations Processing System – VPS) vendors, with proven ability to provide the interfaces and data transmittals to ensure the client's toll revenues are collected. The following subsections address the functional support Schneider Electric provides to Image Based Toll Transaction processing.

#### 1.7.2.1 Account Matching

Account matching is based on any combination of license plate and vehicle owner. The VPS will be configured to apply account matching to the vehicle license plate. Vehicle plates will be used for grouping all violation transactions.

#### 1.7.2.2 Invoice generation

Group, batch and sort accounts' multiple transactions, validate the rate assignments, include the necessary fees and produce a standard invoice for mail to the account holder or motorist.

#### 1.7.2.3 Ledger account

A new account will be generated if the license plate match generates a different owner from the prior account which will assume to be a transfer of ownership. This is marked on the system so older transactions will be associated with the old account and new transactions will be connected to the new account.

#### 1.7.2.4 Correspondence Generation

All correspondence with the customer will be associated with a group of transactions initially submitted as a convenience letter or the initial violation notice. This group of transactions is tied to a single invoice number which will be included on the document. Each document will also have a unique document number to uniquely identify it; it is a subcode attached to the invoice number.

This will allow a document reviewer to quickly associate documents to the same invoice as a batch. The documents will include a barcode of the document number on the footer of the first page which will allow returned correspondence to be scanned and automatically associated with the customer account.

Correspondence will be generated according to the current business rules and will include:

- Convenience Letter
- Violation Notice 1
- Violation Notice 2
- Collections Notice
- Court Package

Correspondence will be generated using the standard document processing workflow which includes document review and printing options.

#### 1.7.2.5 Document Processing

Document processing is controlled through a workflow process designed to allow batch creation of documents and the ability to review, reject, hold and print documentation.





#### 1.7.2.6 Document Scanning

Documents can be scanned and automatically associated with a customer account. This is accomplished in one of two ways: Original document barcode is included on the document being scanned and a cover sheet is generated prior to scanning. The scanner will be configured using the scanning vendor's supplied software to drop the scanned documents onto a network folder on the application server. The software will recognize the barcode and name the scanned document appropriately.

#### 1.7.2.7 Account Updates

Accounts may be updated manually from a CSR screen that will allow operator notes to be entered along with a timestamp. The system will allow full search of the VPS system for violations by the following methods:

- · Search date range
- · License plate number
- Account number
- Invoice number

#### 1.7.2.8 Bill of Material

In Exhibit 1.7.2.8 - 1 is the Bill of Materinal needed to be procured to develop and deploy the Project Server Host.





Exibit 1.7.2.8 - 1: Bill of Materials



/ISED BY: T, Hammond			INIW LICOI	# CENTRAL HOSTS PER LOCATION QUARTITY	2	TOTALS 2		NA.
	DESCRIPTION	PRIMARY SOURCE MANUFACTURER	PART NUMBER U	MC	CENTRAL HOST	SPARES	DEV.	TOTAL (
SUBITEM SUBITEM				CENTRAL HOSI				
VEL ERVERS								
I CENTRAL HOST APP SERVER		J Dali	050720					
d 2133MT/s RDIMMs e Performance Optimized f BGB RDIMM, 1500MT/s, Low Volt, D g No Operating System h No Media Required i RAID 5 for H330/H730/H730P (3-16 j PERC H730 RAID Controller, 1GB NV k 1.2TB 10K RPM SAS 66bps 2.5in Hot l IDRACT Express m Broadcom 5720 OP 1Gb Network Da n Broadcom 5720 OP 1Gb Network Int o Risers with up to 6, x8 PCIe Slots + 1, p Dual, Hot-Djug, Redundant Power Su q C13 to C14, PDU Style, 12 AMP, 6.5 I Performance BIOS Setting s ReadyRais* Sliding Rails With Cable t Bezel u DVD-f-RW, SATA, Internal v Electronic System Documentation ar w 3Yr Bask Hardware Warranty Repair x No Installation	M Cache, 8.0GT/s QPI, Turbo, HT, 4C, 130W, Max Mem 1866MHz  ual Rank, x8 Data Width  HDDs or SSDs) Cache plug Hard Drive  ughter Card erface Card x16 PCIc Slot pply (141), 750W eet (2m) Power Cord, North America  Management Arm  d OpenManage DVD Kit for R720	Dell Dell Dell Dell Dell Dell Dell Dell		1	2 4 2 2 16 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			2 2 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
y Declined Remote Consulting Service		Dell	1	ncl 1	2			2
a PowerEdge R720, Intel® Xeon® E-26XX Pro b 2.5" Chassis with up to 8 Hard Drives		Dell Dell		ea 1 ncl 1	2 2			2 2
d 1600 MHz RDIMMS e Performance Optimized f BGB RDIMM, 1600MT/s, Low Volt, D g No Operating System h No Media Required i RAID 5 for H710P/H710/H310 [3-16 j PERC H710P integrated RAID Contro k 300GB 15K RPM SAS 660ps 2.5in Ho l IDRACT Express m Broadcom 5720 OP 1Gb Network Da n Broadcom 5720 OP 1Gb Network Int o Risers with up to 6, se PCIeS flots -1 p Dual, Hot-Plug, Redundant Power Su	HDDs)  ler, 1GB NV Cache  ler, 1GB NV Cache  Leptug Hard Drive  ughter Card  stif PCle Slot  ppky [1+1], 750W  olt, 15 AMP, 10 Feet (3m), Power Cord	Dell Dell Dell Dell Dell Dell Dell Dell		2	4 2 2 16 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			4 2 2 16 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

REVISED BY: 17. Hammond	CCF	NIVIA NUST		# CENTRAL HOSTS: PER LOCATION QUANTITY	2	TOTALS 2		
DESCRIPTION	PRIMARY SOURCE MANUFACTURER	PART NUMBER	UOM		CENTRAL HOST	SPARES	DEV	TOTAL Q
SUBLIFEAT				CENTRAL HOST				
w 3Yr Basic Hardware Warranty Repair: 5x10 HW-Only, 5x10 NBD Onsite x No Installation y Deckned Remote Consulting Service	Dell Dell Dell		incl incl incl	1 1 1 1	2 2 2			2 2 2
a PowerVault TL2000 Tape Library, 2U, 24 Slot, 1 or 2 Drives b LTO, Tape, Cleaning Media, Customer Install	Dell Dell	225-4565	ea (ncl	1 1	2 2			2 2
SOFTWARE     a Oracle Database Standard Edition - Base Price - Per Processor     b Oracle Database Standard Edition - Update and Support License - Per Processor     c Oracle Linux     d Zmanda Backup Software	Oracle Oracle Oracle Zmanda		ea ea ea	1 0 1	2 2 2			2 2 2 2
NETWORK COMPONENTS							West Comments	Dear to
1 ILANE SWITCH a Cisco 1921 Integrated Services Router	Cisco	CISCO1921-SEC/K9	ea	1	2			2
2 NETWORK ACCESSORIES  a CAT-6 Network Cables, 6-foot length b CAT-6 Network Cables, 10-foot length	TBD TBD	TBD TBD	ea ea	10 10	20 20			20 20
CABINET COMPONENTS  1 SERVER RAGE						Nivien de		
a NetShelter SX 42U 600mm Wide x 1070mm Deep Enclosure	APC	AR3100	ea	1	2			2
2 SERVER RACK ACCESSORIES  a Rack AIP Distribution Unit 2U 120V 60HZ b Vertical Cable Manager for NetShelter SX 600mm Wide 42U (Qty 2) c Roof Fan Tray 120V 50/60HZ for NetShelter SX 600mm Enclosures	APC APC APC	ACF001 AR7721 ACF501	ea ea ea	1 1 1	2 2 2 2			2 2 2 2
POWER COMPONENTS			Constitution of the last			wat had		
a APC Smart-UPS RT 8000VA RM 208V w/ 208V to 120V 2U Step-Down Transformer b APC Smart-UPS RT 192V RM Battery Pack c UPS Network Management Card with PowerChute Network Shutdown & Environmental Monitoring d Temperature & Humidity Sensor	APC APC APC APC	SURT8KRMXL6U-TF5 SURT192RMXLBP3U AP9631 AP9335TH	ea ea ea	1 1 1 1	2 2 2 2 2			2 2 2 2
2 POWER DISTRIBUTION a Single-Phase Auto Transfer Switch / Metered PDU, 2.9kW 30A 120V, 2U Horizontal mount, 24 5-15/20R & 1 L5-30R outlets, 2 L5-30P inputs	Tripp Lite	PDUMH30AT	ea	1	2			2

# PRICE SHEET CCRMA

## **Host System Installation/Integration**

		11 17 19 19	6,7,110	Unit	Extended
Task				Price	Price
No.	Description	Qty	Unit	(US \$'s)	(US \$'s)
1a	HW - Materials / Equipment	1	Lot	52,453.06	52,453.06
2	Program Management	1	Lot	21,620.10	21,620.10
3	Documentation	1	Lot	26,688.05	26,688.05
4	SW Development	1	Lot	47,881.98	47,881.98
5	System Configuration	1	Lot	35,953.51	35,953.51
6	Installation	1	Lot	39,576.98	39,576.98
7	System Test (FAT, Commissioning, Final Accept, etc.)	1	Lot	40,644.00	40,644.00
				Total	264,817.68
	Optional Item's		T		
1b	Redundent HW	1	Lot	52,453.06	52,453.06
	TOTAL With Optional 2nd server		Serie me		317,270.75

## The Pricing shown above Excludes:

- -- All Recurring Data Communication Costs
- -- Recurring 3rd-Party SW/HW Support Agreements & SW Licenses (Annual Support contract for Oracle SW Lic's will be required to maintain s
- -- Spares Replenishment Costs
- -- Excludes System HW/SW Warranty/Maintenance Services & Support
- -- Excludes Bonding

4-C CONSIDERATION AND APPROVAL FOR NOTICE TO PROCEED WITH PURCHASE OF THE PROJECT HOST SERVER



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## 1 Introduction

Cameron County Regional Mobility Authority (CCRMA) has requested a proposal to include a Project Server Host to their existing toll systems, including the system that is operational, and the Direct Connect project system that is currently in the testing phase. Schneider Electric has reviewed the overall CCRMA toll system and suggests the following approach to implement a Project Server Host that not only supports and serves the current installations; but one that is scalable to meet CCRMA business objectives and expanding system, in the coming years. We have also made provisions to make our recommended Host flexible enough to add a Video Processing System, and to scale up as additional facilities or assets are added to this transportation network. This document is a proposed technical approach and cost structure to achieve these goals.

## 2 Overview

The CCRMA Project Host will include both a Primary and Secondary Host System, each with the same hardware platform and each using an Oracle 11g database with identical configuration, running on Linux. The Primary and Secondary Hosts will contain one database schema/instance for the Host Applications and a separate schema/instance for the Remote Operations Management System (ROMS). Collectively, the databases are known as the Transaction Processing System. The redundant host pair, located at different sites, will operate with the Primary Host in an online configuration and the Secondary Host will be processing in parallel. Transactions from the Lane Side System are streamed directly to each Host in independent parallel paths. The Secondary Host can seamlessly replace the Primary Host in the event of a failure or a disaster. Secondary processes would need to be manually directed to be online, but there is no data disruption. The Secondary Host will be used for data recoveries in the event the Primary Host is down, or in a disaster situation the Secondary Host can be transitioned to be the online Host with manual intervention. Host locations will be determined by CCRMA with input and suggestions by Schneider Electric. Our initial recommendation is to place one of the servers at the original SH550 location. This location provides adequate heating and cooling and an acceptable environment for a Host location. Once the scope is agreed to, we will work together to evaluate a location for the HOST that best fits the needs of CCRMA.

The Project Host uses Oracle 11g in an "off the shelf" configuration and does not contain any special Oracle patches or custom applications. The database is installed per Oracle's documentation, and no special tuning procedures or third party products are used to alter the functionality. The Project Host does rely on the Oracle Recovery Manager (RMAN) product that allows the database to be backed up daily without taking the instance offline.

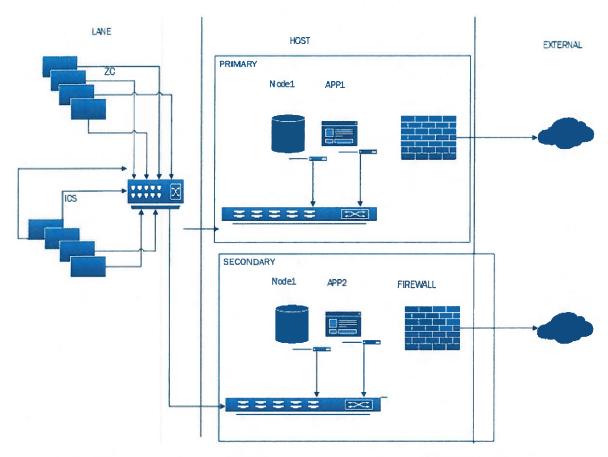


Exhibit Error! No text of specified style in document.-1: Sample Host Block Diagram

Every vehicle that is processed by the lane has a transaction associated with it. The transaction data is passed over to the database, from the lane, via a stored procedure call. The stored procedure in the database will apply duplicate checking and other various verifications against the data before it is stored in one or more Transaction tables.

The system is constructed using two redundant machines. The Host refers to the Primary Host; It's architecture is designed to support maximum availability and reliability. The system is designed with a fully redundant database server referred to as the Secondary Host. Both the Primary and Secondary Host(s) are always online and receiving transactions from their respective Zone Controllers. In the case that the Primary Host/Zone Controller fails, the Secondary Host/Zone Controller would simply be re-configured to act as the Primary until recovery on the actual primary has completed.

All of the machines will be connected via a secure intranet using an IP-based network. The Host will be the primary file distribution machine. It will be responsible for transmission and verification of the files that are sent to the Lane Controllers (LC). Each LC uses a variety of configuration files, tag files and fare schedules. The Host will act as the primary gateway for this information, in the event of system failure the Secondary Host machine can be manually configured to perform these tasks.

The system is designed to support user workstations that are used in conjunction with a custom Graphical User Interface (GUI) to operate the toll system. Each of these workstations will be running current versions of the

Microsoft Windows Operating system. The GUI is a web-based application that operates in a browser window. The GUI provides CCRMA with a customized interface to the configuration and reporting screens.

### 2.1 Transaction Life Cycle

One of the core responsibilities of the Project Host is to ensure that each transaction is accounted for and reaches a terminal state and is reconciled. This process flow is called the Transaction Lifecycle. This is the same transaction lifecycle has been deployed and operated in conjunction with the Texas Interoperability Hub (IOPHub) for CCRMA. This robust workflow design allows for maximum revenue collection though the IOPHub by processing transactions through both payment types: tag and image-based transactions. The workflow will also support the International Bridge Interface system for tag processing.

At the heart of the Project Host is the Workflow Engine (WFE) module, which is a generic component that manages different workflow processes. In the case of the transaction aging, the WFE is configured with the statuses, transitions, and events that pertain to the process of transaction aging. Transaction aging is the processing cycle of a transaction from the point in which it is created until is reaches its end point, for example, it is paid or coded off.

Using a WFE will provide improved visibility to track the state of each transaction at any given time, allowing better reporting on transaction status and reconciliation and providing a clearly defined path for each transaction, with consideration for all known possible outcomes.

The Project Host transaction module communicates with the WFE module to register a transaction, track the transaction through its various stages, until it reaches one of the terminal states. The WFE maintains the full lifecycle history of every transaction within the ETC System. The WFE actions can be triggered by various events, including file exchanges and timer component or by a business rule time constraint.

Each and every transaction identified at the lane is mapped to a workflow work item. The system's workflow process defines the lifecycle of a work item. The work item moves through different stages of its lifecycle until it reaches its terminal stage. When such a terminal stage is reached by a work item, the transaction attached to it is said to have completed its lifecycle. The Schneider Electric WFE and this design feature allow end to end auditability and traceability of event data through to transaction processing and reconciliation.

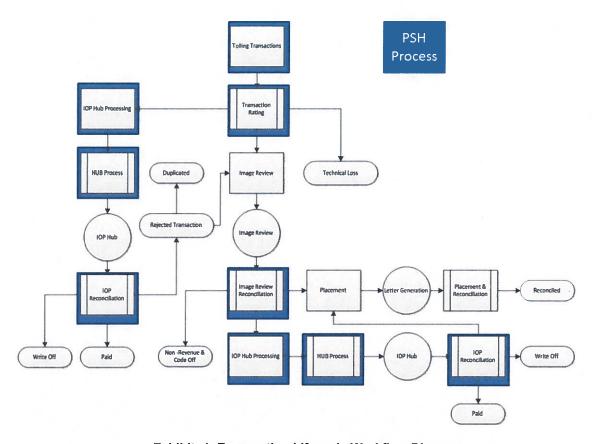


Exhibit -1: Transaction Lifecycle Workflow Diagram

The transaction lifecycle in Project Host starts when a transaction is brought to database from the toll zone controller (ZC). Once the transaction has been inserted in the database it is acknowledge and reported with confirmation back to the ZC System using guaranteed protocols. Now that the transaction is engaged in the transaction life cycle, the rating engine processes it to see if the transaction is associated with a valid tag recognized by the IOPHub or the International Bridge Interface. The transactions that are associated with a valid tag are pushed to a Pending for Tag stage. Transactions that do not have a valid tag are pushed to the Pending for Image Review stage. The Image Review process collects all such transactions and their associated images and forwards them to the appropriate location for image review. The image review process can be managed within the Host System or it can be managed by a third party, however CCRMA deems appropriate.

Transactions in the Tag Stage will be sorted and evaluated in order, first by IOPHub and then by International Bridge, prioritizing valid IOPHUB tags. Valid IOPHUB tags will be sent to CTRMA to be processed by the IOPHub and will operate under CTMRA life cycle and Business Rules. The CTRMA interface will be described in following sections. The Valid International Bridge tags will be will be transmitted thought its own independent interface described below.

International Bridge Transactions that are accepted and paid will reach an ending stage in the transaction life cycle and will be fully reconciled and reportable. International Bridge Transaction that are rejected, by the bridge will follow the Pay By Mail lifecycle and will be sent to the Pending Image Review Stage to be processed by CTRMA.

#### 2.2 External Interfaces

The CCRMA tolling system includes several components that communicate with each other over various protocol and data structures. The Zone Controllers create transactions for every vehicle passing; the image capture stations capture the images. These data are then uploaded to the plaza host systems. These data are available for reporting, billing, image review, etc. This section explains how these various systems interface with each other within the tolling system and with the external systems. The robust architecture and organization provides the flexibility and scalability to interface to multiple diverse external systems without need to re-architect or significant development, when client needs change.

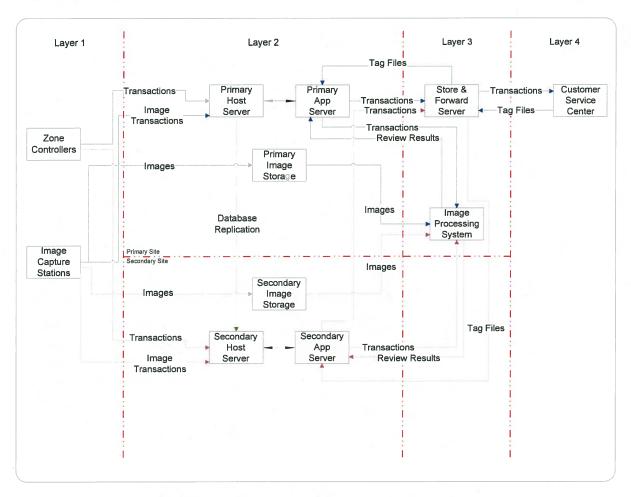


Exhibit 2-1: High Level Architecture and Data Flow

Exhibit 1-1 above provides a high level architecture of the tolling system components and the data flow. The systems are grouped into 4 layers. The tolling solution starts with the Zone Controllers and the Image Capture Stations on the road side, which forms the layer 1. This is where the transactions are formed and the images are captured. Layer 2 is comprised of the Host (Database) Server, the Application Server and the Image Storage systems. Layer 2 is where the data is stored for further processing with the IOPHub, image processing and reporting. Layer 3 contains the Image Review. Layer 4 is the external CSC IOPHub or image-based tolls processing systems.

#### 2.2.1 Layer 1 - Roadside Interface

For every vehicle that passes through the lane the Zone Controller generates a Vehicle Transaction record and an AVI Payment record (when a tag read is available). The Zone Controller triggers the camera and sends the camera trigger event to the Image Capture Stations. The Image Capture Stations download the images from the cameras and correlates them with the transaction to form the Image Transaction record (containing the vehicle image mapping information) and then downloads the images to the long term storage. The Zone Controller communicates the Vehicle Transaction and the AVI Payment records to the host server. The Image Capture Stations transmit the Image Transaction records to the host server.

Both the ZC and the ICS uses XML to format the data and transfers the data over the TCP protocol. On the host server, the inserter processes receives these XML messages and inserts them into the database. This communication is always active, meaning that the data from the road side is downloaded to the host server as soon as the data is available. The TCP protocol guarantees the delivery of the messages. All file and data transmissions use guaranteed-delivery protocol. A transaction is not marked as transmitted until it is fully committed to the database. Any errors that take place create a ticket and maintenance personnel are informed to solve the issue. This prevents any data corruption or any larger issues from occurring by ignoring a problem that can be duplicated and go unnoticed.

#### 2.2.2 Layer 2 – Project Host Server

The Project Host Server (PHS) consists of the Host Database server and the Application server where the images are stored. The PHS serves as the primary data repository for the entire system. Data generated by the road side, data received from the CSC, system configuration data, user configuration data. The database is sliced into several schemas based on the functional requirements. The schemas available are: ETCTRXREP is the revenue schema, ACLREP is the user account management, ROMSREP is the ROMS data, and WFEREP is used for workflow management.

The architectural design of the host system keeps focus on improving performance, scalability, data access and integration with other systems. This utilizes cutting-edge technologies and modern concepts that allow aligning the product with the current market vision and expectations. The main architecture follows the MVC pattern. It is an architectural pattern that splits interactions between users and applications into three distinct non-overlapping roles: Model, View & Controller. This separation of responsibilities facilitates the independent development, testing, and maintenance of each role – including providing modular scalability for client's evolving needs.

#### 2.3 External Interface

As described above the Project Host controls all external communications from the ETC System to third parties via the defined ICDs, which will include file exchange protocols. The IOPHUB and International Bridge process TVL and LVL files on Project Host and process the files in first in first out order. The CTRMA interface will be responsible for distributing TVL and LVL Files.

#### 2.3.1 CTRMA Interface

The CTRMA Host server will act as a gateway between the CCRMA tolling system and any external systems. The CTRMA host will appear to be transparent, as if the CCRMA host is communicating directly to the IOP HUB. The CTMRA Host server will run an Oracle database to host the transactions to be sent to CSC. The CTMRA Host server will also provide a drop box facility for the CSC to exchange files. The CTMRA Host server will also run its own web services interfaces.

Our web services client will communicate with the application server to query for the transactions that are in the IOP and insert them into the local database. When these transactions are inserted into the database they will be marked as "New" transactions.

Schneider Electric will use the current version of the IOP ICD. Transaction reconciliation from the IOP will be filter down from IOP through CTRMA. Transaction reconciliation can be performed at all three levels, CCRMA Host, CTRMA Host and IOP reports. Should CCRMA choose to interface directly with the IOP HUB, that configuration could be made with minor adjustments.

An operating system user account will be created on the host machine for the CSC and the CSC will use this account to login to this server to drop off the TVL and LVL files. The file system monitoring process will check for incoming files every few seconds (which is configurable) and the files will be processed in the order they are received. The host system will expose a web service to load the external files and when a new file arrives the file system monitoring process will identify the type of file, perform preliminary verifications of the data and then invoke the web service call, which will load the file into the CTRMA database.

#### 2.3.2 International Bridge Interface

Schneider Electric has 20 years' experience developing ICDs with different entities and agencies. Schneider will support the TVL and Transaction file interface of the International Bridge.

All our external interfaces have included file-based systems as well as Web services. Schneider Electric considers any external interface to be a gateway into the system, and our experience ensures they are correctly designed, sandboxed, and protected to prevent revenue loss and enforce end-to-end auditability. All data transmissions will have acknowledgement and negative-acknowledgement (ACK/NACK) for each datum, message, or file as appropriate. The proposed system design also accounts for the ability to reject files or data, notifying the external parties, based upon defined conditions or rules, providing feedback including error codes. ROMS provides direct automatic notification in the event of negative-acknowledgement or error condition. This assures that that no negative-acknowledgement or error condition goes unnoticed, because ROMS notifies the proper parties, ensuring the issue is handled correctly and in a timely manner. In addition to real time monitoring, each interface has its own reporting capabilities and dashboards to show file or information transfer over a period of time, working or processing queues, and historical transfer rates.

#### 2.4 Local Reporting

Schneider Electric's PHS solution includes a full suite of reports to meet the financial, and reconciliation needs of CCRMA. The proposed Host application provides robust transaction tracking. The System uses unique identifiers to organize event data. The end-to-end transaction tracking combined with unique identifiers provides powerful reporting capabilities. This includes the capability to audit down to the individual transaction level, providing research capability across the entire lifecycle of the transaction. This information is also reportable at an aggregate level, providing true reconciliation of critical transaction and financial data.

The Schneider Electric Project Host includes a comprehensive set of base reports for traffic, revenue, toll zone operations, auditing, and customer activity. All reporting is provided from data stored on the Host Database Server with report generation performed on the Host Application Server. Our web-based reporting interface provides flexible filtering tools for pinpointing and reporting on specific traffic and financial data. With intuitive navigation, end users (such as CCRMA's authorized staff) can drill down through reports to transaction details.

With the standard configuration, Detailed Transaction items may be filtered to aid in researching any anomalies, facilitate custom reports, answer questions, and provide a full audit trail of financial events and data. The reports will be based on the same CTRMA reports that CCRMA uses today. Schneider Electric will enhance the reports to allow for auditability and transaction reconciliation for the International Bridge transactions.

All the host reports defined in this document are generated based on the online, non-aggregated data. Reports can be generated on screen for review before exporting to PDF or text editor and Excel readable CSV format. The

reporting module and graphical user interface will be available for user access 24/7, without any blackout periods. Users, with proper security permissions, can create reports and also subscribe to reports for distribution by email.

In general, all reports will have the same look and feel with variation in the content of the selected report. Each report will have CCRMA's logo in the upper left corner, as well as footer with the date and time the report was printed, the page number, the number of pages and the version number of the report itself, plus the date definition (revenue date or calendar date).

All reports are designed with several aspects in mind. The first consideration is the ease and convenience to the user. A friendly and intuitive interface to the reports allows the user to select from a number of parameters including time range, lane number, user when necessary, and various other specific criteria dependent on the report type. This allows for very detailed information to be returned in the report, specific to the user's needs...

The second design perspective is expandability. The reports are set up in a way that accommodates expansion of the client's toll facilities as needed. Expansion of the reporting System to recognize additional locations does not require a software change; instead, the reporting automatically detects configuration changes within the database. This is an important feature, as it allows for a much smoother transition in the future if expansion on the toll system were to take place.

The last aspect is information. Reports are a fundamental way to inform CCRMA about what exactly is happening on the plaza. It is important to see the information, process it, and make decisions accordingly. Reports vary in purpose from high-level reporting to detailed audit reports and trails providing highly-detailed data and analytics. Reports have been created with this in mind, and structured in a way to make this feasible. The reporting tool allows for in-use drill down from higher level (summary) data to detailed transaction data with simple interface of clicking on the report's line items, which facilitates research and allows thorough visibility into the toll system information from annual or quarterly reporting, down to transactional data and events.

Schneider Electric's Host reports are organized in a hierarchy that is reflected in the user-interface. Each grouping of reports has its own pull down menu. The standard Host reports include the following:

- Reconciliation Reports
  - Daily Revenue Reconciliation
  - o Daily Transaction Reconciliation
  - o Payment Reconciliation
  - o Transaction Detail
  - o Transmission Reconciliation
- Plaza Administration Reports
  - o Lane Fare Schedule
  - o Lane File Transfer History
  - O System Health Report
- Revenue Reports
  - Non Revenue by Agency
  - o vToll by Lane
  - o Code Offs by Lane
  - o Plaza Transaction Detail
  - O Transaction Summary
  - o Reconciliation Summary Report
- Traffic Reports
  - o Detailed Transaction
  - o ETC Penetration Statistics
  - o Transaction Disposition

#### 2.5 Data Retention

The detailed transaction data is to be retained online for period of 1 calendar year. Summarized traffic data at 5 minute resolution is to be retained for a period of at least 5 years. Traffic and revenue (expected) data will be summarized per lane and per day, per 5 minute interval. It will be continuously collected via database triggers as transactions happen and stored in summary tables.

The detailed transaction and summarized data will be stored in the host database. The purge process will delete daily the data older than 1 year from transactional (non-summarized) tables. Summarized tables will be cleared in similar fashion, except for data older than 6 years. This will ensure that 5 full years of summarized data are available for comparison (for example comparing revenue for years 2014 and 2009). Also, deletions on any original transaction records stored in the host database will only come from archive functionality.

The detailed transactions data is also buffered locally at the Zone Controller in circular buffer file. Size of the file is configurable and determines the length of time that before transaction data is overwritten by the new transactions. This buffer file also adds a level of redundancy to the transaction data, and can be used as a source of data recovery in the case of unexpected failures.

The current image storage is 30 million which would far exceed current traffic volumes for one year but is sized to handle the PYM or Image Review services. This storage is based upon only being a project server host, as the system grows this will decrease for storage of other data in the pay by mail process. Even when adding the pay by mail application it will be enough storage to handle the first five years of operations.

#### 2.6 Hardware

Schneider Electric designs our Project Host System with mandatory requirements for redundancy and availability using a pair of identically configured server configurations. Each Project Host server is a mirror image of the other and each operates independently and in parallel, receiving the same data simultaneously from each ZC/ICPS. If one Project Host were to lose power or connectivity, the other Project Host would continue to function normally with no loss of data.

## **PRICE SHEET** CCRMA **Host System Installation/Integration**

	TOTAL With Optional 2nd server				317,270.75
1b	Redundent HW	1	Lot	52,453.06	52,453.06
	Optional Item's				
				Total	264,817.68
	System Test (FAT, Commissioning, Final Accept, etc.)	11	LOL	40,044.00	40,044.00
6	Installation System Test (FAT, Commissioning, Final Accept, etc.)	+ +	Lot Lot	39,576.98 40,644.00	39,576.98 40,644.00
5	System Configuration	1 1	Lot	35,953.51	35,953.51
4	SW Development	1 1	Lot	47,881.98	47,881.98
3	Documentation	1	Lot	26,688.05	26,688.05
2	Program Management	1	Lot	21,620.10	21,620.10
1a	HW - Materials / Equipment	1	Lot	52,453.06	52,453.06
No.	Description	Qty	Unit	(US \$'s)	(US \$'s)
Гask				Price	Price
				Unit	Extended

## The Pricing shown above Excludes:

- -- All Recurring Data Communication Costs
  -- Recurring 3rd-Party SW/HW Support Agreements & SW Licenses (Annual Support contract for Oracle SW Lic's will be required to maintain s
- -- Spares Replenishment Costs
  -- Excludes System HW/SW Warranty/Maintenance Services & Support
- -- Excludes Bonding

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